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PUBLIC MEETING  
BETWEEN U.S. NUCLEAR REGULATORY COMMISSION 0350 PANEL  
AND FIRST ENERGY NUCLEAR OPERATING COMPANY  
OAK HARBOR, OHIO

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Meeting held on Wednesday, November 12, 2003, 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

John "Jack" Grobe,  
Senior Manager, Region III Office  
& Chairman, MC 0350 Panel  
William Ruland, Senior Manager NRR  
& Vice Chairman, MC 0350 Panel  
Christine Lipa, Projects Branch Chief  
Dave Passehl,  
Project Engineer - Davis-Besse  
Christopher Scott Thomas,  
Senior Resident Inspector  
U.S. NRC Office - Davis-Besse  
Jon Hopkins,  
NRR Project Manager - Davis-Besse  
Monica Salter-Williams,  
NRC Resident Inspector

FIRST ENERGY NUCLEAR OPERATING COMPANY

Lew Myers, FENOC Chief Operating Officer  
Robert W. Schrauder,  
Director - Support Services  
James J. Powers, III  
Director - Nuclear Engineering  
Mark Bezilla, Vice President/Plant Manager  
Clark Price, Owner - Restart Action Plan  
Mike Roder, Manager - Plant Operations  
Craig Hengge, Engineer - Plant Engineering

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1 MS. LIPA: Okay, good  
2 afternoon everyone. I would like to welcome members of the  
3 public and FirstEnergy for accommodating this meeting  
4 today. This is a public meeting between the NRC's  
5 Davis-Besse Oversight Panel and FirstEnergy Nuclear  
6 Operating Company.

7 My name is Christine Lipa. I'm a Branch Chief in  
8 Region III Office of the NRC, located near Chicago; and I'm  
9 responsible for the NRC's Inspection Program at  
10 Davis-Besse.

11 We'll go through, the next slide is the purposes of  
12 the meeting. These are our two main purposes today. It's  
13 really the NRC folks will be talking quite awhile about  
14 some recent NRC activities, and then we'll turn it over to  
15 the Utility later on for them to present the status of  
16 activities that they've been working on.

17 The next slide is the agenda. So, this shows the  
18 first six bullets or so are NRC topics and then we'll be  
19 turning it over to the Licensee. We'll be taking breaks as  
20 we need to after about an hour.

21 Okay, I would like to make some introductions. Up  
22 here at the table on the far left is Dave Passehl. Dave is  
23 a Project Engineer in NRC Region III Office.

24 Next to Dave is Bill Ruland. Bill is a Senior  
25 Manager in NRR and he's the Vice Chairman of the

1 Davis-Besse Oversight Panel. And Bill's position is the  
2 Director of Project Directorate 3 in the Division of  
3 Licensing and Project Management.

4 Next to Bill is Jon Hopkins. Jon Hopkins is the  
5 Project Manager in NRR for the Davis-Besse facility.

6 On my right is Jack Grobe. Jack is the Senior  
7 Manager at the Region III Office and he's Chairman of the  
8 Davis-Besse Oversight Panel.

9 Next to Jack is Scott Thomas. Scott is the Senior  
10 Resident Inspector here at the Davis-Besse facility.

11 We have a number of other NRC folks in the audience  
12 today; if you'd raise your hand when I call your name. We  
13 have Monica Salter-Williams. She's a Resident Inspector at  
14 Davis-Besse.

15 We also have Viktoria Mitlyng. She's with Public  
16 Affairs in Region III.

17 We also have some folks out from Headquarters.  
18 Margie Katzalas. She's a Technical Assistant in NRR.

19 We have Doug Weaver. He's the Region III  
20 Coordinator with the Executive Director for Operations  
21 Office.

22 We have Jeff Wright. He's a Project Engineer from  
23 Region III.

24 We have Brian Sheron, who is the Associate Director  
25 for Projects Licensing and Technical Analysis.

1       We have Ted Marsch. Ted is the Director for the  
2       Division of Licensing and Project Management.

3       And then that's about it for NRC folks that I had on  
4       my list.

5       Lew, if you want to introduce folks at your table,  
6       then turn it back over to me.

7               MR. MYERS:       Thank you.

8       Couple people down at the end of the table. We have  
9       Clark Price. Clark is with us today and he will discuss  
10      the, our Restart Action Plan.

11      Craig Hengge is with us today. Craig will talk  
12      about the RC Pressure Test.

13      Jim Powers will discuss Engineering Calculations.

14      To my left, Mike -- we have Mike Roder. We have  
15      Mark Bezilla next to me. Mark is the Site Vice President.  
16      He'll be talking about our performance and heatup test, and  
17      Mike Roder will talk about the Operations Improvement  
18      Plan.

19      Bob Schrauder is back with us today, and he will  
20      discuss some of our progress in the HPI area and stuff.

21      And in the audience, we also have some of our  
22      members today. Joe Hagan is with us. Joe is the Senior  
23      Vice President of Engineering Services.

24      And Fred Von Ahm is with us. Fred is the Vice  
25      President of Oversight.

1 Gary Leidich is also with us today. Gary is our,  
2 our President.

3 And, we have a new member I would like to introduce,  
4 Barry Allen today.

5 Stand up, Barry.

6 Barry is a new member to our management team here.  
7 Barry was born in Lubbock, Texas, and he came to us from  
8 Entergy Company. Barry graduated with a degree in Civil  
9 Engineering from the University of Texas; a good  
10 engineering school; and began his career at Arkansas in  
11 1985.

12 He's been a Design Engineering Manager, a Plant  
13 Engineering Manager, and Triple S: Engineering  
14 Supervisor, Mechanical Maintenance Superintendent, and  
15 Maintenance Manager at the B&W unit there.

16 Then he transferred down to Waterford, where he was  
17 Director of Engineering and went to River Bend in Emergency  
18 Preparedness, so he's got an SRO certification. So, I  
19 think on both, he's working in both the CU unit and the B&W  
20 unit down the Arkansas.

21 So, he brings to us a tremendous amount of  
22 experience. He joined our team October 31st, and he's  
23 going to be the Director of Operations, what we call the  
24 Plant Manager. We continue to use those terms  
25 interchangeably, but it's the Director of Operations.

1       And we're really proud to have Barry with us. He's  
2   a good person that will bring a lot of experience with some  
3   really good performing plans. So, we're excited about  
4   having him on our team now.

5       That's all I have. Thank you.

6               MS. LIPA:           Okay, thank you,  
7   Lew.

8       I would also like to ask the local public officials  
9   to stand up and introduce themselves.

10              MR. PAPCIN:       John Papcin,  
11   Ottawa County Commissioner.

12              MS. LIPA:       Hi, John.

13              MR. WITT:       Jere Witt, Ottawa  
14   County Administrator.

15              MS. LIPA:       Hi, Jere.

16       Okay. I would like to go through a few opening  
17   remarks. This meeting is open to public observation,  
18   obviously, but this is a business meeting between the  
19   Nuclear Regulatory Commission and FirstEnergy.

20       The way we're going to work it is at the conclusion  
21   of the business portion of the meeting, but before the  
22   meeting is adjourned, the NRC staff will be available to  
23   receive comments and questions from the public and answer  
24   questions.

25       On the way in today in the foyer, there were copies

1 of the NRC monthly newsletter. Looks like this. And there  
2 were copies of the slides that I'm talking from that are  
3 being presented here. Also, back on this newsletter, on  
4 the back page, it has contact information for how you can  
5 reach our Public Affairs staff in Region III. It has the  
6 website address, phone numbers, email addresses, so a lot  
7 of good information how you can reach us, if you have  
8 comments or questions that you don't bring up today.

9 We also have a Public Meeting Feedback form  
10 available on the table that you can use to provide comments  
11 back to us on how this meeting went today.

12 We're having this meeting transcribed today by Marie  
13 Fresch and she will maintain a record of the meeting. What  
14 we've been doing is these transcripts are usually posted to  
15 our webpage within about four weeks of each meeting. So,  
16 it's important that the speakers use the microphone today,  
17 so Marie can follow along.

18 The next slide is the summary of the October 7  
19 meeting. I'm not going to go through the summary of that  
20 meeting, but these are the major topics that were  
21 discussed.

22 The next slide talks about some NRC activities since  
23 the October meeting. The O350 Panel reviewed and  
24 determined that four items on the Restart Checklist were  
25 satisfied and are now closed. There are still nine items

1 open on the checklist. The entire list is detailed on page  
2 4 and 5 of our November monthly newsletter. That has the  
3 whole list and which ones are closed, which ones are still  
4 open.

5 The next slide shows some other activities since our  
6 last monthly meeting. I mentioned last month that we  
7 issued a final yellow finding on the containment sump,  
8 because of potential for clogging. That was issued early  
9 in October.

10 We also issued a preliminary greater than green  
11 finding on the HPI, High Pressure Injection Pump Design  
12 Deficiencies. And that final significance will be issued  
13 once we complete our risk assessment on that issue.

14 The next activity was the Normal Operating Pressure  
15 Inspection. We had some inspectors out from Region III  
16 observing that whole activity, and they exited with the  
17 Utility folks on November 6th.

18 Another activity was the Completeness and Accuracy  
19 of Information Inspection. That was held, and that was  
20 exited today with the Facility and we'll be providing a  
21 summary of that later.

22 And also Maintenance Rule Inspections, those are  
23 baseline NRC inspections that were done recently.

24 The continuing NRC activities; we have Safety  
25 Culture/Safety Conscious Work Environment Inspection. This



1 is our Phase 3 Inspection that continues. Jeff Craig, the  
2 team leader for that inspection is here today, and he'll be  
3 on site observing the activities.

4 We also have the Resident Inspections that  
5 continue. We have three Residents that are assigned to  
6 Davis-Besse and they perform day-to-day inspections of  
7 plant operations, maintenance, testing, and engineering.

8 The next slide shows upcoming NRC activities.  
9 Starting next Monday, we'll have a three-person team, which  
10 includes two Senior Risk Analysts. They will be  
11 inspecting items that the Licensee does not have scheduled  
12 to resolve before restart. This is considered a backlog.  
13 Our review of that will include engineering, documents in  
14 engineering work orders, as well as equipment maintenance  
15 activities.

16 The NRC is also preparing to conduct a Restart  
17 Assessment Team Inspection when the Utility nears the point  
18 when it's ready to go to Mode 4. And this inspection will  
19 review the readiness of the plant and plant staff to resume  
20 plant operations safely and in compliance with NRC  
21 requirements.

22 And the inspection findings from that Restart  
23 Assessment Team will be considered by the Oversight Panel  
24 before we make our restart decisions.

25 Next month's regular monthly 0350 Meeting will be

1 held here on Wednesday, December 3rd.

2 The next thing we would like to do is talk about  
3 three recent inspections, but actually in four parts, from  
4 some recent inspections. The first one, I'll turn it over  
5 to Jack Grobe.

6 MR. GROBE: Thank you,  
7 Christine.

8 We expected to have Zelig Falevits here today. He  
9 was the Team Leader of our Corrective Action Team  
10 Inspection. His flight was cancelled out of O'Hare this  
11 morning, so he's going to be here a little bit late. I'm  
12 going to attempt to fill in for Zelig.

13 The purpose of the Corrective Action Team Inspection  
14 and what I'm going to do here today is to discuss and  
15 present the objectives of the inspection as well as the  
16 results of the Corrective Action Team Inspection. The team  
17 was on site for a total of five weeks beginning last March  
18 and it ended in September of 2003.

19 In March of 2002, the degradation of the reactor  
20 head was identified at Davis-Besse. FirstEnergy's cause  
21 evaluation for the head degradation identified as a  
22 significant contributor, an inadequately effective  
23 correction process.

24 The implementation of the Corrective Action Program  
25 at Davis-Besse was ineffective in the conditions adverse to

1 quality, including significant safety issues were not  
2 appropriately identified, evaluated and resolved.

3 As part of the Davis-Besse Program Compliance  
4 Building Block, it's one Building Block of the series of  
5 blocks in the Restart -- excuse me, Return to Service Plan,  
6 FirstEnergy developed a Corrective Action Program,  
7 Restart Implementation Action Plan, to address the  
8 identified deficiencies in the Corrective Action Program.

9 Next slide, please.

10 The team assessed FirstEnergy's Corrective Action  
11 Program implementation and its effectiveness by evaluating  
12 the Davis-Besse organization's effectiveness at identifying  
13 plant design, equipment and human performance related  
14 deficiencies; categorizing those identified deficiencies  
15 properly, correct the assessing and evaluating the  
16 deficiencies and identifying root causes; determining the  
17 extent of condition, the extent of the deficiencies, and  
18 identifying any potential generic issues; adequately  
19 implementing corrective actions and performing trending  
20 activities of less significant issues to identify broader  
21 concerns.

22 So, the Corrective Action Team Inspection evaluated  
23 each of these areas of the Corrective Action Program.

24 A particular focus of the inspection was  
25 FirstEnergy's Engineering Organization's effectiveness at

1 implementing corrective actions. The team reviewed many  
2 Condition Reports, Collective Significance Reviews and  
3 Apparent and Root Causes, Calculations, Assessments and  
4 Completed Effectiveness Reviews. The team also evaluated  
5 effectiveness of FirstEnergy's corrective actions to  
6 address design and equipment issues by sampling completed  
7 corrective actions.

8 One of the other Building Blocks in the Return to  
9 Service Plan for Davis-Besse is the Management and Human  
10 Performance Excellence Plan. One purpose of that plan was  
11 to address FirstEnergy's conclusion that management  
12 ineffectively implemented processes and thus failed to  
13 detect and address plant problems as opportunities arose.  
14 This team inspection also evaluated the effectiveness of  
15 management's and independent oversight of the Corrective  
16 Action Program implementation.

17 Next slide, please.

18 The inspection team was composed of mechanical and  
19 electrical engineers, which were also experienced in  
20 conducting -- excuse me, conducting problem identification  
21 resolution inspections. The team members included five  
22 regional engineering inspectors, as well as five  
23 engineering consultants; a total of ten inspectors. Most  
24 team members possessed extensive experience totaling nearly  
25 300 years of experience in nuclear engineering and

1 corrective action related activities in the nuclear power  
2 industry.

3 Next slide, please.

4 The team reviewed and evaluated over 400 selected  
5 Condition Reports. And in evaluating each of those  
6 condition reports, examined numerous documents,  
7 calculations, evaluations and assessments. These included  
8 Condition Reports of conditions adverse to quality,  
9 significant conditions adverse to quality, and other  
10 collective significance assessments.

11 The team reviewed corrective actions, basic and  
12 apparent and Root Cause Evaluations, performance indicators  
13 for the Corrective Action Program, various engineering  
14 products, such as electrical and mechanical calculations,  
15 modifications and operability determinations.

16 The team attended, observed and assessed the  
17 effectiveness of various management oversight meetings.  
18 During those meetings, FirstEnergy reviewed and classified  
19 Condition Reports, evaluated and performed a critique of  
20 root causes and engineering products and prioritized work  
21 activities.

22 The inspectors also conducted interviews of  
23 management and plant personnel to determine the depth of  
24 knowledge and involvement in implementation of the  
25 Corrective Action Program.

1 Finally, the inspectors evaluated the effectiveness  
2 of the quality assurance audits and self-assessments of  
3 Corrective Action Program implementation, and FirstEnergy's  
4 follow-up on quality assurance audit findings.

5 A total of 25 violations of NRC requirements were  
6 identified by the Corrective Action Team Inspection in the  
7 areas of identification problems, conduct of apparent and  
8 root cause evaluations to evaluate the deficiencies, and  
9 resolution of technical issues.

10 Consistent with our Significance Determination  
11 Process, all of the violations were classified as green or  
12 very low safety significance. Concerns were identified in  
13 several Corrective Action Program implementation areas.

14 During this extended outage, FirstEnergy has  
15 identified and resolved many thousands of issues. Not  
16 withstanding and somewhat concerning, the team identified a  
17 large number of violations that were discussed with  
18 FirstEnergy during our exit interview and will be presented  
19 in our inspection report. There were three themes that  
20 evolved from these findings.

21 Next slide, please.

22 The team identified instances of failure to  
23 appreciate the scope of existing design and equipment  
24 problems when the deficiency was first identified in  
25 examples of inadequate cause evaluations of design issues.

1       While some problems were found with Root Cause  
2       Evaluations, the issue primarily focused in the area of  
3       apparent cause evaluations. This often resulted in an  
4       overly narrow focus of the corrective actions implemented  
5       to address the Condition Report.

6       The team also identified a significant number of  
7       corrective actions to address engineering related problems  
8       where multiple examples of inadequate engineering work  
9       products were identified. These included lack of  
10      engineering rigor, and analyses and calculations to support  
11      corrective actions, inconsistent performance among  
12      engineering disciplines, and insufficient knowledge of  
13      design and licensing basis.

14      Finally, early during the outage, we suspended,  
15      FirstEnergy suspended the trending program due to the large  
16      number of Condition Reports that were identified. The  
17      trending program is important. It trends less significant  
18      issues to identify deeper problems that might be occurring;  
19      for example, procedural adherence problems, procedural  
20      adequacy issues, human performance problems in isolated  
21      areas of the plant operations.

22      The trending program is one early indicator of  
23      safety culture problems. Recently, the trending program  
24      was reinstituted. It's too early to evaluate the  
25      effectiveness of that trending program.

1       Also, the Corrective Action Program includes reviews  
2 of the effectiveness of actions taken to address  
3 significant conditions adverse to quality. Many of those  
4 significant conditions were only recently resolved late in  
5 the outage. These effectiveness reviews occurred  
6 approximately six months after the implementation to  
7 corrective actions. Again, it's too early to evaluate the  
8 adequacy of those effectiveness reviews.

9       We understand, Lew, that you plan on discussing your  
10 views on these theme areas or concern areas and corrective  
11 actions that you are planning or have already taken  
12 regarding these activities. The oversight panel evaluated  
13 the results of the Corrective Action Team Inspection and  
14 determined that it needed to hear your perspectives today  
15 on these issues and your corrective actions before it could  
16 consider whether sufficient actions had been taken to  
17 address the Restart Checklist item on the adequacy of the  
18 Corrective Action Program.

19       That completes our presentation of the results of  
20 the Corrective Action Program Inspection. I expect that  
21 Inspection Report will be out before Thanksgiving and there  
22 will be significantly more detail on the individual issues  
23 in the report itself.

24       Christine.

25               MS. LIPA:           Thank you. What



1 we'll do is we'll go through all the NRC inspection  
2 activities, and then turn it over to FirstEnergy and we'll  
3 hear their response to the Corrective Action Team  
4 findings.

5 The next inspection that I wanted to cover was an  
6 inspection of a Licensee activity where the outage brought  
7 the plant up to normal operating pressure and normal  
8 operating temperature and held it for seven days. During  
9 that time frame --

10 We don't have a slide for this, if you want to just  
11 go to the opening NRC slide.

12 -- the Utility brought the plant to normal operating  
13 pressure, normal operating temperature and performed  
14 extensive inspections on the competence of the Reactor  
15 Coolant System. We also had an inspector from the Region,  
16 John Jacobson, who led an inspection that included himself  
17 and the Resident Inspectors to also walk down components  
18 during that time frame, observe the Licensee's inspections  
19 and also do independent inspections.

20 John Jacobson could not be here today. He did have  
21 an exit meeting with the utility on November 6th, and his  
22 inspection report should be out within about a month.

23 So, the focus of his inspection was on performance  
24 of the Reactor Coolant System leak testing activities and  
25 the operations performance aspect during that time frame

1 and will be covered separately by Scott after I'm completed  
2 here.

3 John reviewed the, a couple of testing procedures;  
4 the Reactor Coolant Leakage Test and American Society of  
5 Mechanical Engineers Section 11 Pressure Testing Procedures  
6 to verify adequate scope and code compliance. Procedures  
7 were found to be acceptable.

8 John and his group also reviewed a sample of  
9 inspection personnel certifications, and verified  
10 compliance with your certification procedure and applicable  
11 codes and standards.

12 The inspectors accompanied several of your, the  
13 Licensee's inspection teams in the field, and he observed  
14 prejob briefings, field inspection techniques, verified  
15 procedure compliance, and assessed overall inspection  
16 performance.

17 During the walkdown in Containment in what's called  
18 the West D Wing, John identified a condensate leak on a  
19 steam line; and in the East D Ring, he identified a steam  
20 leak on a seal weld on a pressurizer local transmitter  
21 source valve. In both cases, it appeared to us that the,  
22 your own inspectors missed these calls.

23 In response, you took the teams and swapped them and  
24 reperformed the inspections. Some additional findings did  
25 result from those reinspections. While John was out here,

1 he reviewed your analyses of those results and found the  
2 conclusions to be reasonable.

3 John and the Residents also observed the majority of  
4 the bottom head incore nozzle remote inspection, including  
5 an initial direct look through the insulation opening. He  
6 considered that there was appropriate visual acuity, and  
7 lighting checks were performed, resolution and coverage was  
8 excellent, and there was careful examination in reference  
9 to the baseline photos and demonstrated no apparent leak  
10 indications.

11 The inspectors also observed over half of the upper  
12 head control rod drive mechanism penetration remote  
13 inspection. They did find some discrepancies that need to  
14 be looked at further, such as some thin white stains that  
15 were noted on a few of the nozzles, as well as some small  
16 particles of loose debris. The team reviewed your  
17 evaluation of these issues and found it to be acceptable.

18 In conclusion, there were no, what they considered  
19 to be, popcorn-like indications noted; there were no  
20 indications of leakage.

21 The inspectors also observed a portion of the  
22 control rod drive mechanism flange remote inspection, and  
23 that included an initial direct look through the lexan  
24 covers in the service structure. There were a few things  
25 that needed to be reviewed further, such as several rust

1 trails and water spots, as well as some boric acid residue  
2 on the name plate area and around several test connection  
3 covers. The team reviewed the Framatone evaluation of  
4 these indications and found it to be acceptable.

5 So, the conclusion from that inspection was that as  
6 a result of the Normal Operating Pressure Test activities,  
7 we have reasonable assurance that there is no pressure  
8 boundary leakage and that nonpressure boundary leakage is  
9 minimal.

10 So, I'll turn it over to Scott next.

11 MR. THOMAS: The Resident Staff  
12 issues an inspection report approximately every seven  
13 weeks. This is a brief recap of several operational issues  
14 that were documented in that report which is Inspection  
15 Report 2003-18. That report specifically covers the time  
16 period between August 21st and September 3rd, 2003.

17 There were five noncited violations and three minor  
18 violations that dealt directly with operational, operations  
19 issues. They focused mainly on operator performance,  
20 procedure adherence, and procedure quality; and I'll  
21 briefly go over each of these issues.

22 There is an NRC identified finding of various safety  
23 significance. It was identified when inspectors discovered  
24 a significant amount of loose material in the containment  
25 building, subsequent to a final closeout inspection

1 performed by senior licensing management. This was  
2 considered as a noncited violation having to do with  
3 procedure performance.

4 The next issue was an NRC identified finding of very  
5 low safety significance. This was identified when  
6 inspectors discovered that procedural guidance which  
7 governed the performance of the immediate action  
8 maintenance process did not exist. This was also  
9 considered a noncited violation of Criterion 5 Appendix B.

10 The next issue was an NRC identified finding of very  
11 low safety significance. This was identified when  
12 inspectors discovered that operations management  
13 inappropriately authorized the performance of immediate  
14 action maintenance process to perform adjustments on number  
15 one turbine driven Aux. feedwater pump governor during  
16 their NOP test. This was considered a noncited violation.

17 The next issue was a self-revealing finding of very  
18 low safety significance. This was identified when it was  
19 determined that the procedure for testing the response time  
20 of the Aux. feedwater pump one turbine did not adequately  
21 describe the acceptance criteria for successful completion  
22 of the test. This was considered a noncited violation in  
23 the area of procedure quality.

24 The next issue was a self-revealing finding of very  
25 low safety significance. This was identified when control

1 room staff did not adequately monitor control coolant  
2 system pressure during reactor coolant system heatup, which  
3 resulted in valve or flood 1 B, the discharge valve from  
4 the core flood tank, caused this valve to open  
5 unexpectedly. This was considered a noncited violation.

6 The next issue is a minor violation. While  
7 performing Aux. feedwater check valve reverse flow test,  
8 the initial system conditions using the guidance stated in  
9 the procedure could not be established to perform this  
10 test. To correct this condition, the test leader attempted  
11 to vent the upstream pressure seen by the valves. Steps  
12 for this venting were not in the procedure and specific  
13 approval was not obtained from the control room staff prior  
14 to manipulating the vent valves. This was determined to be  
15 a minor violation of technical specifications due to the  
16 fact that the component was isolated and nonservice at the  
17 time this occurred.

18 The next issue is also minor, considered a minor  
19 violation. While attempting to establish additional  
20 turbine plant cooling water flow through the generator  
21 hydrogen coolers, a spill of approximately 80 gallons  
22 occurred due to vent drain valves associated with the  
23 generator hydrogen coolers being inappropriately left  
24 open. This was considered a minor violation due to, this  
25 had no impact on safety-related systems or operation of a

1 TPCW system.

2 The next issue is also considered a minor  
3 violation. The procedure used for plant heatup was  
4 deficient because, due to the differences in tolerances  
5 between the pressure instruments that monitor loop 1 RCS  
6 pressure and loop 2 RCS pressure and the S valve channel  
7 preRCS pressure, it was unlikely that the reactor operators  
8 could establish the prescribed pressure band for the core  
9 flood 1A and core flood 1B interlock testing sequence  
10 without also reaching the actuation set for core flood 1B,  
11 which did occur.

12 Those were the issues that were documented in that  
13 report. As a result, the Licensee issued a Collective  
14 Significant Condition Report and significant corrective  
15 actions have been taken or progress is being taken, and I'm  
16 sure that they will highlight that as part of their  
17 presentation today.

18 So, that's all I have.

19 MS. LIPA: Okay, thank you,  
20 Scott.

21 Next is Dave Passehl.

22 MR. PASSEHL: Okay. Earlier  
23 today, we conducted an exit meeting regarding the Utility's  
24 corrective actions to address Restart Checklist item 3.i,  
25 which is the process for ensuring completeness and accuracy

1 of required records and submittals to the NRC.

2 The inspection was conducted during the week of  
3 October 20th and was led by myself, with Jon Hopkins, our  
4 NRR Project Manager, and Bruce Berson, our Region III  
5 counsel.

6 The purpose of the inspection was for the NRC to  
7 determine whether reasonable confidence exists that  
8 important docketed information is complete and accurate in  
9 all material respects.

10 In accomplishing the inspection, we reviewed a  
11 number of areas. We look at their Implementation Action  
12 Plan documents that they use to address this Restart  
13 Checklist item. We reviewed their training materials. We  
14 looked at their conduct of training. We reviewed a sample  
15 of submittals that Davis-Besse made to the NRC between  
16 January 1996 and March 2002.

17 We performed a focus review of submittals from  
18 Davis-Besse to the NRC; and these submittals were assessed  
19 as a result of an omission in a Licensee event report that  
20 I'll get to in a second, but we performed this piece of our  
21 inspection to assess changes that were made from draft  
22 documents and we compared those drafts to the final  
23 documents to assess the major changes.

24 We also reviewed the results of a site-wide  
25 questionnaire that Davis-Besse had sent to its employees to



1 determine whether any of their employees were aware of any  
2 inaccurate or incomplete statements and submittals to us.  
3 We reviewed a sample of submittals from Davis-Besse to the  
4 NRC that were not evaluated under their project plan.

5 We reviewed three letters Davis-Besse had sent to  
6 us; July 15th, August 15th, and September 15th; that  
7 address some material statements that Davis-Besse had  
8 identified; and we reviewed those from an enforcement  
9 perspective.

10 And, lastly, we reviewed their October 24th, 2003,  
11 final report, which summarized the results of their  
12 efforts.

13 Now, we identified -- as a result of the inspection,  
14 we identified two apparent violations. Apparent violations  
15 are violations where we have to perform further review in  
16 the Region to assess the significance of the violations.  
17 But, we identified two apparent violations, one of which  
18 was in their response, their November 11th, 1998, response  
19 to Generic Letter 98-04, which involved protective coating  
20 deficiencies to form material in containment.

21 The other apparent violation we identified was a  
22 result of an issue they described in their August 15th,  
23 2003, letter to us, where information was deleted from the  
24 apparent cause of occurrence section in that Licensee Event  
25 Report without apparent sound basis and may have

1 contributed to that submittal being incomplete and  
2 inaccurate.

3 We identified five noncited violations, and these  
4 are violations of very low safety significance; one of  
5 which involved their reply to Generic Letter 88-14, which  
6 involved the instrument air supply; one of which involved  
7 the License Amendment Request 98-06, regarding fuel  
8 material cladding.

9 Another noncited violation involved a License  
10 Amendment Request 96-08, which involved an application to  
11 revise technical specifications on the ultimate heat sink.

12 And two other noncited violations concerned items  
13 from their July 15th letter, one of which was an LER,  
14 License Event Report 98-05, and another one was a request  
15 for additional information, which was a response from  
16 November 2001, concerning a third ten-year ISI.

17 The Utility informed us today that there is some  
18 additional information that they want to give us on that,  
19 so we will take that information and review it. It may  
20 change the characterization of these issues.

21 We also identified one minor violation concerning a  
22 statement in a Licensee Event Report 99-03, where they  
23 indicated within the last three years there have been no  
24 LERs related to overcooling; and there was, in fact, an  
25 overcooling event that the Utility had discovered and did

1 not mention in LER.

2 So, overall, we've concluded that Davis-Besse has  
3 taken appropriate corrective actions to ensure the future  
4 regulatory submittals should be complete and accurate in  
5 all material respects. Davis-Besse revised their  
6 administrative procedures for regulatory submittals to  
7 ensure that they're validated before they can be issued.

8 And, what I mean by validation of submittals is that  
9 they verify statements of fact in their submittals. They  
10 look at those statements against source documentation. For  
11 example, a calculation, specifications, statements in the  
12 updated safety analysis report.

13 We've reviewed their site supervisory personnel have  
14 been given training, and we've concluded they're cognizant  
15 of the requirements of 10 CFR 50.9 for completeness and  
16 accuracy of information. And they're aware of the  
17 implications of not complying with those requirements.

18 The new supervisor training includes management  
19 responsibilities related to completeness and accuracy.  
20 They have also had requirements for new employee training.

21 Our inspection determined that there was no  
22 widespread noncompliances of regulatory requirements or  
23 programmatic concerns associated with the preparation,  
24 review, and submittal of regulatory correspondence to the  
25 NRC from Davis-Besse.

1 Under the Davis-Besse Return to Service Plan,  
2 Davis-Besse has conducted extensive reviews that verify its  
3 systems, programs and organizations are ready to support  
4 safe and reliable operation.

5 Davis-Besse activities have been extensively  
6 reviewed by us, by the NRC, as documented in several NRC  
7 Inspection Reports, including those that evaluated the  
8 adequacy of their Safety Significant Programs, inspections  
9 that we've conducted to review the Root Cause Evaluation  
10 for Management and Human Performance aspects of the Reactor  
11 Coolant System boundary leakage and degraded reactor vessel  
12 head. And we've conducted inspections to evaluate their  
13 operational capability and design of safety significant  
14 structures, systems, and components.

15 So, given the results of this inspection, together  
16 with their, this Completeness and Accuracy Inspection,  
17 together with the results of their efforts in the Return to  
18 Service Plan, the NRC has reasonable confidence that  
19 important docketed information is complete and accurate in  
20 all material respects. Therefore, the Davis-Besse  
21 Oversight Panel decided to close Restart Checklist Item  
22 3.i. We should have an Inspection Report out on this  
23 inspection in about 30 days.

24 Christine.

25 MS. LIPA: Okay. Thanks

1 Dave.

2 I also wanted to mention a couple of other NRC folks  
3 who are here. Zelig Falevits, who was the Team Leader from  
4 the Corrective Action Team Inspection. And welcome, Zelig.  
5 Glad you made it.

6 Also Patricia Loughheed, who is a member of the  
7 Corrective Action Team Inspection.

8 And then earlier I neglected to mention we have two  
9 NRC interns out from NRC Headquarters, Leslie Miller and  
10 Jeff Hickson.

11 MR. GROBE: Thanks,  
12 Christine.

13 Lew, before we turn it over to you, and particularly  
14 for members of the public, it's difficult sometimes to  
15 understand the context of our inspection findings. Many of  
16 the findings are very technical and focus on a lot of  
17 detailed day-to-day operations at the plant. I just wanted  
18 to provide a couple of contextual comments before, before  
19 you folks begin your presentation.

20 We kind of had a mixed bag of inspection findings  
21 over the last 30 days. Dave just highlighted the results  
22 of the Corrective Action -- excuse me, The Completeness and  
23 Accuracy Inspection, with positive results. While there  
24 are a couple of outstanding issues and the organization is  
25 still reviewing some additional documents, the spectrum of

1 activities that you've accomplished during the outage give  
2 us confidence that the docket contains accurate  
3 information, and we can have confidence in the safety  
4 significant information that's been submitted in the past.

5 Christine highlighted part of the Normal Operating  
6 Pressure Test Inspection, which was also positive. While  
7 Jon identified some specific issues that your inspectors  
8 overlooked. By and large, you inspected a thousand or more  
9 components and did a pretty good job on the Reactor Coolant  
10 System. That test demonstrated that the Reactor Coolant  
11 System has good integrity, and that's a positive finding.

12 By contrast, the Corrective Action Team Inspection  
13 and Scott's findings in the Operation area during the  
14 Normal Operating Pressure Test are somewhat troubling.  
15 The, there were a number of violations, more violations  
16 than we would have expected to have seen. And those  
17 violations indicate some areas of concentration that you  
18 need to focus on.

19 The performance in these two areas is not consistent  
20 with what we would expect, it's not consistent with our  
21 requirements, and it's not consistent with what we would  
22 expect from a well-operated plant. So, the panel is  
23 particularly looking forward to hearing your assessment of  
24 those activities, and what actions you've taken, and what  
25 you plan to take.

1 With that, I'm going to turn it over to FirstEnergy  
2 for your presentation.

3 MR. MYERS: Okay. Thank you,  
4 Jack.

5 Our presentation today and our desired outcome is to  
6 provide you an update on our progress toward restart  
7 today. You know, we keep making milestones and some of  
8 those milestones sometime are very difficult, but I would  
9 say now that even though we got a lot accomplished this  
10 month, some of the issues that you mentioned on Corrective  
11 Action Program, we really were not pleased with, and I  
12 think you'll find that we've taken strong actions in those  
13 areas and we intend to demonstrate that today.

14 We intend to update you on the areas that we intend  
15 to improve before restart. Specifically today, there is  
16 others, but we're just thrilled, we would like to discuss  
17 one of them is the Calculation Program at our plant. I'm  
18 sure that we have good calculations. The next one is the  
19 Corrective Action Program. We would like to discuss that  
20 more after your debrief.

21 I would like to compliment the NRC. You indicate  
22 that was a five-week inspection. I really believe the  
23 total inspection was like, it was five weeks on site, like  
24 two months total, and it had like ten inspectors. It was a  
25 huge inspection. I can tell you it was the most rigorous

1 inspection that I've been through in my career. So, it was  
2 a very, very thorough inspection. So, I would say that.

3 And the Operations Improvement Plan, Action Plan is  
4 another area that is based on the some of the performance  
5 shortfalls we saw in Operations during the NOP Test we'll  
6 discuss today.

7 In particular if you go look at our agenda, the  
8 progress, I'll talk about.

9 Jim Powers will discuss the calculations.

10 Bob Schrauder is with us today. He's the supervisor  
11 in charge of the HPI pumps. He's back with us. He's going  
12 to discuss the Corrective Action Program. And if there is  
13 any questions about the HPI pumps, he's got the first one  
14 installed now, and we're expecting the next one, number  
15 two is installed, number one is expected this week.

16 Mark Bezilla is with us today. He will discuss the  
17 NOP Test and our perspective of that.

18 The Operations Improvement Area, Mike Roder will  
19 discuss his actions he is taking in the Operations area.

20 Craig Hengge will discuss two things, one of them is  
21 the FLUS, that we're extremely proud of, and we're the only  
22 plant in the United States that will be able to  
23 continuously monitor for low level leakage on the bottom of  
24 the head. We're proud of that system. And he'll also  
25 discuss these inspections of the reactor vessel head,



1 bottom head and top head.

2 And then, if we have time, Clark will discuss some  
3 of the key events that we have coming up.

4 Let me move on, talking about some of the recent  
5 progress. From an NRC perspective, we are extremely  
6 pleased to have the extent of condition of boric acid  
7 outside of containment closed, item 2.d, this past month.  
8 That was a major effort walking all the systems down  
9 outside the Aux. building, and getting that item closed. I  
10 have a list of work orders here, hundreds of work orders.  
11 So, pleased to get that closed.

12 The Quality Audits and Self-assessment Program,  
13 extremely glad to get that closed.

14 Completeness and Accuracy of Information, item 3.i,  
15 we just discussed. That was, I'm telling you that was a  
16 huge, huge effort by our staff, going back and looking at  
17 previous records. What I can tell this team and you is our  
18 new process; Dave, I think you know this; we benchmarked  
19 our new process for validation against the best industry  
20 standards. I think that process is strong. I won't say  
21 it's an industry lead, but it's as strong as any one's.  
22 So, we're pleased with that process.

23 Then Licensee Restart Action Plan, item 5.a, got  
24 closed. In general to summarize, right now we have, there  
25 is 22 items been closed and nine remaining. And those

1 nine, we would consider most of those ready for closure or  
2 will be closed just prior to start up. I think is where  
3 we're at right now. So, we continue to make progress  
4 there.

5 Another area we completed, I want to talk a moment  
6 about our Restart Test Plan, seems to be some confusion,  
7 the names seem to run together so much. The Restart Test  
8 Plan is basically complete. It consists of what we call a  
9 pressure test, 50 pounds and 250 pounds. We completed that  
10 a couple months ago, few months ago.

11 Then, the next test that was under there was the  
12 Containment Integrated Leak Rate Test. We talked about  
13 that in a public meeting also. We got one of the lowest  
14 leak rates in our plant in history. I think, in fact, the  
15 lowest in the plant. So, put the containment back in good  
16 stead.

17 Another part of that is a separate plan, it's called  
18 an Integrated Restart Test Plan. That plan consists of  
19 really two parts; one is the 7-day test that we just did at  
20 operating pressure that you all discussed; and the other  
21 one is the integrated, is the Integrated Startup Plan that  
22 we're putting in place now, based on the actions that we've  
23 taken as part of the 7-day test.

24 The 7-day test allowed us to get rid of a lot of  
25 things that Mark will discuss, there were lessons learned

1 from the previous shutdown. Our intent now is to focus on  
2 the actions that we'll discuss today, and then somewhere  
3 around the, I think it's the 24th of November, we'll be  
4 sending you our, our report asking for authorization to  
5 restart. So, we intend to send you that around the 24th of  
6 November.

7 Now, we'll go over the various steps today, if we  
8 have time, in Clark's report.

9 The next area that we completed, are pleased with,  
10 is the high pressure injection pump. We've not run on  
11 schedule, in fact, we're a couple weeks behind. We had  
12 some issues that we needed to get resolved with the pump  
13 manufacturers and we did that.

14 The number two pump though is here and installed in  
15 our plant. The, and we installed that I think extremely  
16 well, and ahead of schedule, once we got it back on site.  
17 So, we're pleased with that.

18 The picture you're seeing here is, Joe getting right  
19 here, electrical breaker coordination. It's electrical  
20 breaker coordination, which is under way. And if you look,  
21 this is an issue we've been talking about. I think we're  
22 installing like 24 breakers, we're replacing 24 breakers  
23 with these fuse disconnects. And one of the things with  
24 that, we're pleased with these, we had these manufactured  
25 to directly replace the breakers to solve the issue that

1 we found.

2 And we think, as you know, this issue has been here  
3 since day one. It was a part of the original licensing  
4 with the plant, but this adds a lot of margin to our  
5 Electrical Distribution System. One of the things the  
6 operators wanted when we manufactured these, we thought  
7 that was an example of their showing good leadership, was  
8 they demanded and we didn't have that initially, but they  
9 had an indication on the outside of the bus of a breaker or  
10 the disconnect row of any of the fuses blowing. You can  
11 see the fuses there in the center.

12 So, we had to go back and modify these things and  
13 put a mod in that would identify any failed fuses. That's  
14 the blue light that will be on each one of these panels.  
15 So, that was a good modification, well worth us doing.

16 MR. GROBE: Lew, I have a  
17 question about the fuse disconnect issue.

18 MR. MYERS: Yes.

19 MR. GROBE: I understood that  
20 you're performing that modification in an at-risk context,  
21 and this past weekend during your cross-disciplinary  
22 review, there was the identification of some additional  
23 breakers that needed to be replaced with fuse disconnects.  
24 Could you provide some more detail on that?

25 MR. MYERS: Jim can do that.

1           MR. POWERS:       Yes. I can answer  
2 that, Jack.

3       Actually this modification is not being performed on  
4 an at-risk basis. The modification in its final form is  
5 being delivered, targeted to be complete today, but as you  
6 mentioned, part of the Interdiscipline Review over the  
7 weekend, when a package goes out, we have design interface  
8 evaluation process that sends it to the various discipline  
9 experts at the site to give their input to it.

10       One of the inputs we got is related to our  
11 Appendix R Fire Protection Program and how it relates to  
12 the Electrical Distribution System. And when our engineer  
13 for the fire protection looked at the modification, he  
14 identified that there was some, there was seven additional  
15 fuse disconnects that we needed to add in order to ensure  
16 that we maintain consistency with our licensing basis for  
17 Appendix R Fire Protection Rule in terms of operator  
18 response and how you restore electrical devices through the  
19 plant in a post-fire situation.

20       There is a rule in place that we have agreed to that  
21 we don't use tools, for example, to do restoration. And  
22 so, we found in review of the package, that by installing  
23 fuse disconnects in seven more loads, we would maintain  
24 consistency with the commitments we have to-date.

25       So, we think that was a good find. Shows that the

1 design process is working. Our communications up to this  
2 point have been part of the design development, but is  
3 finalized when you get these level of reviews. So, good  
4 demonstration of how the rigor of the program is executed.

5 MR. THOMAS: So, these seven  
6 additional buckets are load?

7 MR. POWERS: That's the load  
8 buckets; that's correct, Scott.

9 MR. GROBE: Just to make sure  
10 I understand, the total then would be 31 breakers that will  
11 be replaced with fuse disconnects?

12 MR. POWERS: That's right,  
13 Jack.

14 MR. GROBE: That will not  
15 only provide you with the required electrical coordination,  
16 but also give you the ability to make sure you can respond  
17 to a fire anywhere in the plant with just electrical  
18 distribution.

19 MR. POWERS: That's correct.

20 MR. MYERS: Thanks.

21 MR. THOMAS: One point while  
22 we're on this subject. Have the post-maintenance tests  
23 been--

24 MR. POWERS: Finalized yet?

25 MR. THOMAS: -- developed?

1           MR. POWERS:        They're under  
2   development and I haven't heard the final layout of those  
3   post-modification tests, Scott. I'll be able to find that  
4   out back at the site and I'll brief you on that.

5           MR. THOMAS:       Thank you.

6           MR. MYERS:        We went over that  
7   the other day, we'll check the loads, if that's what you're  
8   asking.

9           MR. POWERS:       Yes, starting  
10   loads.

11          MR. THOMAS:       I understand, I  
12   just wanted to understand the progress toward identifying  
13   the post-maintenance tests.

14          MR. MYERS:        Okay, thank you.  
15   Next slide, please.

16        You know, one of the other things we're pleased  
17   about, we had this aligned training; and that was the last  
18   of our annual human performance action plans items. We sat  
19   down with each and every employee for the past few weeks in  
20   groups of about 20, 10 to 20 at a table, and have these for  
21   a whole day and went through all of the items that remained  
22   to be done at the plant and the items that we have to  
23   complete in the long term over the next cycle.

24        We thought that training was probably the best  
25   training we've done with our employees since I've been

1 here. Mark and I both; I kicked off every session, even  
2 the night sessions that started at 7:00 at night until 7:00  
3 I think the next morning, 8:00; and then Mark would come  
4 in, and end the training. So, he's a better morning person  
5 than I am. So, that worked out well.

6 That training was a major effort for us. We did, we  
7 talked about Learning Adventures, Learning Ops we  
8 installed. And we thought it was very, very, very  
9 effective. And we had a videotape that we can share with  
10 you, everyone today, but it's an extremely powerful tool  
11 and we thought worked out well with our employees.

12 One of the things we did during that training is we  
13 decided to add a module that we hadn't told you about  
14 before. It was alignment training; here's the things we  
15 had to get done. Came out in the Haber report. We decided  
16 to take each and every person we have on site and train  
17 them on Safety Culture's model. And so we did, we spent a  
18 few hours training each and every employee. We don't think  
19 any other utility we know of has done this at a plant, but  
20 we went through our model step-by-step and all the  
21 attributes associated with that model.

22 And then we had the employees sit down and do a  
23 survey and grade us on Safety Culture. And, next meeting,  
24 I intend to provide you a lot of information on Safety  
25 Culture and Safety Conscious Work Environment. As you



1 know, we're going to do our next Safety Culture Assessment  
2 ourselves as a management team. I started Thursday.

3 Also, I would say, I was extremely pleased with the  
4 results of that Safety Culture Survey that we did with our  
5 employees. So, we got feedback to us. What I found was,  
6 looking at the numbers, was not only the numbers were  
7 higher than I had even hoped for, but they're never higher  
8 than I hope for, but they were high.

9 But what I really appreciate was the trend. One of  
10 the lowest areas that they rated us on was training. And  
11 if you go look right now, as you all know, we have not been  
12 in some areas keeping our training going like we should  
13 because of the outage we're in, you know. So, if you went  
14 back and looked at the areas we rated ourselves in the last  
15 time, it was training.

16 So, there was extremely good correlation between our  
17 assessment and the employees' assessment. In every area I  
18 could just follow and see that alignment was something that  
19 I was very pleased with.

20 Additionally, we did another survey that we just  
21 completed in Safety Conscious Work Environment Survey. We  
22 shared the results with you before. We'll share the  
23 results next time. Again, we were pleased, continued to  
24 see improvements in performance with that survey too, in  
25 the Safety Conscious Work Environment area.

1        Now, some other things that we do, is we have QA do,  
2   perform their own survey of Safety Culture/Safety Conscious  
3   Work Environment, where they have face-to-face  
4   communications with about 80 some employees. That's  
5   complete too.

6        Then we have some independent contractors to come  
7   in. In general right now, so that gives us what I think is  
8   good correlation. You know, if you look at things every  
9   way in the world and you have good correlation, what you're  
10   looking at should be good data, and convergence. A term we  
11   use is convergence; and what we see is good convergence  
12   with all those tools that we're using to measure both  
13   Safety Culture and Safety Conscious Work Environment.

14       And then as the month went on, one of the things  
15   that we just did, is we put our first, our third quarter  
16   report for System Health. And, one of the things we wanted  
17   to do as a management team was assign each system to a  
18   manager, and which we did, or the superintendents, I  
19   think.

20       And then we walked each and every system down and  
21   looked at the open work orders on that system. Then we had  
22   a meeting about, I think it was last week, where we went  
23   over all the work orders and what we found as a group of  
24   managers. Some of us, you know, had to get operators go  
25   with us, like me, they gave me heat ~~trace~~ **trace** and cathodic

1 protection. But when you look and say, "Where is this  
2 located?" They would say, "various." Various is a big  
3 area. So, I had to get a little help myself. So, I walked  
4 down like a hundred something work orders.

5 So, I think from a management team standpoint, we  
6 have a good appreciation for the material condition of our  
7 plant.

8 From our restart standpoint, we had the Restart  
9 Overview Panel met this week to provide additional restart  
10 approval. And what that means, they gave us additional  
11 restart approval which means to us that they looked at the  
12 information we provided them and gave us a list of items  
13 that they want us to bring back on December 3rd before we  
14 come to you to say that we got those items closed. I'll  
15 share those items with you in a moment.

16 And, finally, we've been working on the Emergency  
17 Preparedness. You know, we've had a few emergency  
18 preparedness drills throughout the outage that we've done  
19 very well on. We did have a negative trend in the  
20 supervisor classification area, so we focused on that  
21 trend, and that trend now has turned around. And we're  
22 going to continue to focus on it until we get that in very  
23 good stead.

24 There is also some administrative issues there. Let  
25 me share this with you for a second. The issue is

1 classify, notify, and take the right corrective action.  
2 The problem we had was there was two boxes on the sheet.  
3 One of them said, "Is this real or is it not real?" "Is it  
4 a drill or is this a real event?"

5 In our training simulator we always use everything  
6 that this is real. That's what we've done for 20 years.  
7 So, we made a change. The supervisors would continue to  
8 check the box, "This is a drill." So, we've gone back and  
9 worked on that criteria, which really was not one of the  
10 objectives, but that's what that was; and we made, we're  
11 making some administrative changes too that will help  
12 that. So, we think that trend we show good progress.

13 MR. GROBE: Lew, before you go  
14 on. I want to make a couple observations.

15 We're very fortunate today to have, as Christine  
16 indicated earlier, Brian Sheron and Ted Marsch here. Brian  
17 reports directly to Jim Dyer, Director of NRR, and Ted  
18 works for Brian. They're responsible for the technical and  
19 licensing activities for all of the nuclear plants in the  
20 United States. And, last month, Sam Collins was on site,  
21 and had an opportunity to tour the site, as did Brian and  
22 Ted, and spend time with the NRC staff as well as your  
23 staff.

24 Sunday, Jim Caldwell my boss, Regional Administrator  
25 in Region III, was on site all day with Scott and Monica

1 and Jack Rutkowski, and did extensive tours of the plant.

2 Then, we spent all day yesterday observing your Restart

3 Overview Panel Meeting. And that meeting began at 8 in the

4 morning and we were done a little after 8 in the evening,

5 and I understand it went on a couple odd hours after that.

6 So, we've had extensive engagement by our management

7 team both from Chicago and Washington, and we expect that

8 to continue.

9 MR. MYERS: Okay. Thank you.

10 I would like to share with you what the Restart

11 Oversight Panel does. What we'll share with you next time

12 you're here that we'll focus on. The areas they're

13 concerned with is our Power Ascension Plan. They want to

14 review our Power Ascension Plan.

15 Electrical System Coordination Improvements that we

16 discussed awhile ago; we have to finish that work and do

17 the post-modification maintenance testing to prove that the

18 mod works.

19 The Service Water Resolution, service water system

20 right now that we're giving a lot of focus, we've got some

21 issues outstanding on. We're working through those issues,

22 and we want to brief on those.

23 Containment Air Coolers, that work is really

24 complete, but we didn't talk about that at the meeting, so

25 they want us to bring the Containment Air Coolers back and

1 discuss that.

2 High Pressure Safety Injection Pumps. As you know,  
3 we have, Bob's got one of those pumps installed. We're  
4 getting ready to install the other one, but we have to do  
5 the testing of the pumps yet, so we have to come back and  
6 go to closure there.

7 Containment Readiness. We had the containment in  
8 good stead. We did the Mode 4 Test, did some work in  
9 there. We have to go back and talk about, is the  
10 containment ready for startup.

11 Procedure Use and Adherence. That's a training. And  
12 that's an area we're focusing on now, based on some of the  
13 performance shortfalls that we've seen and you've seen.  
14 So, they want us to discuss how that training has gone and  
15 what they think the effect of that will be.

16 Emergency Preparedness -- I'm sorry.

17 Operational Improvement Action Plan. We're going to  
18 discuss that here today, but we won't be through with the  
19 operation, Operations Improvement Action Plan until the  
20 latter part of the month, the first of next month.

21 Emergency Preparedness is a huge, huge area for  
22 everyone. We've got to make sure when we start the plant  
23 up, we've not lost our heads in emergency preparedness, so  
24 they want us to talk about that.

25 After we get started up, they want to see the plans

1 we have in place. The Operational Improvement Plan is a  
2 large plan that we're going to be submitting to you as part  
3 of the restart request. And then there is plans on the  
4 new, continuing to focus on reducing the engineering  
5 backlogs, the equipment reliability programs, the FENOC  
6 programs, and then engineering calculations.

7 So, we'll be looking at both engineering backlog,  
8 maintenance backlogs, and then long term FENOC plans.  
9 That's what the ROP wants to see next time, what we'll be  
10 discussing. So, you weren't in the last two hours. This  
11 is what came out of the last two hours.

12 With that, I'm through and ready to turn it over to  
13 Jim Powers, if there are no questions.

14 MS. LIPA: Lew, I had some  
15 question on the next ROP meeting; did you have a date on  
16 that?

17 MR. MYERS: It's December  
18 5th.

19 MS. LIPA: December 5?

20 MR. MYERS: Yeah, I'm not that  
21 senile.

22 MS. LIPA: Then, also on  
23 Containment Air Coolers, I missed what you said on that,  
24 did you say that was resolved or not yet resolved?

25 MR. MYERS: It's getting

1 resolved, finishing that work now. We have to put the mod  
2 in. There is a mod for time delay on the valve. Putting  
3 that in, and all that stuff is coming to resolution. When  
4 we get that completed, they want to see the completed work  
5 and what that consisted of at the next meeting. So, we're  
6 getting on that.

7 MR. THOMAS: So, that's been as  
8 a CAC issue, not a service water issue? I'm trying to  
9 understand where it's --

10 MR. MYERS: We have both  
11 service water and CAC, so the valid issues, if you go look  
12 at, it's the size of the CAC, then the whole service water  
13 plan. So we'll give them both, both of them are on the  
14 slate.

15 MR. THOMAS: Okay.

16 MR. MYERS: I know there is an  
17 interface there.

18 MR. THOMAS: I just wanted to  
19 know where you were covering that issue.

20 MR. MYERS: With that, I turn  
21 it over to Jim. Thank you.

22 MR. HOPKINS: I have a  
23 question. Sorry. Before we leave, on cycle 14, the  
24 Operational Improvement Plan. Is that going to discuss  
25 what you plan to do during your mid cycle outage?



1           MR. MYERS:           No, it's in there,  
2 but there is a whole bunch more in there. The mid cycle  
3 outage is in there, but it's a plan showing all the things  
4 that we need to move forward on next year, in Safety  
5 Culture and backlogs and things like that. So, if you go  
6 and look at the training we did with our employees, it's  
7 items, we'll give you all the items that we need to be  
8 working on next year. And under that will be subplans on  
9 how we get that stuff done.

10          So, I'll be glad to share a copy of it with you. In  
11 fact, you'll get it.

12          MR. HOPKINS:        Okay, thank you.

13          MS. LIPA:           Do you have  
14 anything that details what you're plan is for mid cycle  
15 outage, if it's not in this document?

16          MR. MYERS:        I don't know the  
17 answer to that question now. We have the head inspection  
18 in there. We have steam generator inspection in there. I  
19 don't know what else we have in there. Do you?

20          MR. BEZILLA:       It's, we have the,  
21 the agent that's going to do the mid cycle inspection for  
22 us, and we have people that are dedicated to look at what  
23 else we might want to do in that time frame. So, we're  
24 formulating that, putting that together, and that would be  
25 in the work management section of the Cycle 14 Operational

1 Group Plan.

2 MS. LIPA: This might be a  
3 good topic for the next monthly meeting to get into a  
4 little more detail on the mid cycle plans.

5 MR. MYERS: Okay, we'll put  
6 that on the agenda.

7 MR. GROBE: Mark, you said  
8 it's going to be in there. Is it going to be in there with  
9 sufficient detail that we can see the specific work  
10 activities you expect to accomplish, or would it be  
11 implementing procedure or implementing the plan?

12 MR. BEZILLA: That will be  
13 implementing the plan, Jack. Cycle 14 is more of an  
14 outline overview, and then each of the elements have a  
15 detail plan behind it, so we can share where we're at with  
16 our mid cycle from an individual plan standpoint.

17 MR. GROBE: Okay.

18 MR. BEZILLA: It would be a  
19 separate plan.

20 MS. LIPA: I know Jim is  
21 dying to get started, but this would actually be a good  
22 time for a short ten minute break. Thank you.

23 (Off the record.)

24 MS. LIPA: Okay, go ahead,  
25 Jim.

1 MR. POWERS: Thank you,  
2 Christine.

3 I would like to talk about one of the major topics  
4 that resulted from the NRC inspection, and in particular  
5 reference to the Adequacy of Engineering Products to  
6 Address Corrective Actions.

7 Some of the findings that the NRC's Corrective  
8 Action Team had related to our calculations in the plant.  
9 And, as you can imagine over the 25 to 30 year life of the  
10 plant, there has been many calculations performed, some of  
11 them were performed by the original engineering company  
12 that designed the plant, so in the 1970's timeframe, all  
13 the way up to calculations that have been performed in the  
14 recent months.

15 So, calculations are very active and we have a broad  
16 spectrum of them at the plant. And to touch on a history  
17 of the calculations and what we've done with those during  
18 the current outage in terms of review and assurance of  
19 their, their adequacy; as part of our System Health  
20 Assurance Plan Review, included a Safety Function  
21 Validation Review Project, as we referred to it. And those  
22 of you who have, who have followed along, heard our  
23 presentations on that as part of the System Health Building  
24 Block.

25 The purpose of that Safety Function Validation

1 Projection was to provide assurance to the adequacy of the  
2 calculations and designs for the plant's safety function,  
3 to assure the safety functions be performed. And in doing  
4 that, we reviewed our systems at our, what we refer to as  
5 risk significant date, the 15 systems of highest safety  
6 significance that protect the core from damage.

7 We reviewed the calculations that provide the basis  
8 for the safety functions and determined in the majority of  
9 cases the safety functions would be performed, that the  
10 calculations back that up. And the basis were where we  
11 draw that conclusion, we improved calculations as required,  
12 made plant improvements as required to ensure that was the  
13 case.

14 One of the major projects we presented here as well  
15 was our Electrical Transient Assessment Program efforts  
16 where we completely reanalyzed our electrical system. So,  
17 we've been very active in calculations, but the electrical  
18 calculations were set to be improved.

19 MR. RULAND: I just had a  
20 question. I thought you said the majority of calculations  
21 in verifying the safety systems. Could you clarify that?

22 MR. POWERS: Right. Yes.

23 MR. RULAND: 51 percent of the  
24 calculations sounds like a low standard to me.

25 MR. POWERS: I can't give you a

1 specific percentage. What I would point to, Bill, is one  
2 of the cases where we were unable to conclude that the  
3 calculations demonstrated the safety function was the  
4 electrical systems. If you'll recall, the design  
5 presentations that we made back in the Region several  
6 months ago.

7 So, the electrical calc, or Electrical Transient  
8 Program effort of that analysis was one area where we  
9 needed to improve our calculations, and I think we did that  
10 substantially. But for the broad spectrum, I'd say it's  
11 not 51 percent; it's much higher than that, but I don't  
12 have the number.

13 MR. RULAND: I understand  
14 that. I didn't want someone to get the wrong impression.

15 MR. POWERS: Thank you.

16 Some of the calculation process improvements that  
17 we've made during the course of the outage at the plant was  
18 we implemented an NOP procedure that I have listed, the  
19 NOP-CC-3002, entitled Calculations. This is a Nuclear  
20 Operator Procedure, which at FENOC is a standard process at  
21 all three of the plants, utilizes this procedure for  
22 calculations. And that was issued in March of 2003.

23 And it incorporated the operating philosophies and  
24 processes at the three plants, standardized those while  
25 it's taken industry input to issue an operating procedure

1 that was benchmarked against other utilities and provided a  
2 good platform for us to do calculations.

3 We did procedure change training at that time with  
4 our engineers, and talked about changes in the process, in  
5 the procedure, and then we proceeded on to verify calcs per  
6 that procedure.

7 Some of the good attributes that we incorporated  
8 which I wanted to touch on because they're pretty important  
9 improvements to us, the first was Design Interface  
10 Evaluation. I mentioned that earlier in addressing Jack's  
11 question on the Breaker Fuse Disconnect Project and why  
12 there were seven more.

13 Well, the Design Interface Evaluation Process  
14 assures when you change something, whether it's design  
15 modification or calculation, that the results are then  
16 forwarded to the effected specialists, disciplined  
17 individuals around the site to be sure that the results are  
18 promulgated out into operating, maintenance and  
19 surveillance procedures, and instructions to maintain a  
20 good linkage on the sign control and configuration control  
21 by doing that. So, this is a major step forward for us in  
22 having that attribute to the new procedure.

23 And also you see 50.59 listed on the bullet. This  
24 is a process that is used to check if you make a change at  
25 the plant, whether you're changing the licensing basis, and

1 whether you're changing it to the extent that the NRC needs  
2 to be engaged to review the change that you're making. We  
3 have specific rules that we follow carrying out that code  
4 of Federal Regulations, 50.59.

5 The fourth bullet there is a Detailed Design  
6 Verification checklist was included in our procedure. And  
7 this provided a number of checkpoints for our engineers to  
8 go through when they're checking calculations that have  
9 been prepared by others, engineers decide where they're  
10 checking calculation products that have been prepared by  
11 contract organizations on the outside for us. We had a  
12 standardized approach that checklist provides us to go  
13 through to do those checks. So, we put this procedure in  
14 place, and we've used it since March.

15 Now, the CATI Inspection indicated to us that there  
16 were still shortfalls in the quality of our calculations.  
17 This was a concern to us. Lew Myers issued an independent  
18 assessment by an outside engineering organization, a large  
19 nuclear architect engineer, and that company went through  
20 and looked at our calculations, done for the current  
21 procedure, looked at the procedure itself to see if there  
22 were improvements that needed to be made; and they  
23 benchmarked our calculations and procedure against not only  
24 their own internal processes, but those at a large midwest  
25 utility, nuclear utility, to see how, how we matched up.

1       They identified areas for improvement in both the  
2   process and the implementation of the process, how we  
3   prepared our calculations. So, we captured those  
4   recommendations for improvement and will be following  
5   through, as you'll see in the latter part of my discussion,  
6   in implementing those to improve what we do with our  
7   calculations.

8           MR. MYERS:       Jim, excuse me.  
9   That report also indicates, this procedure we put in place  
10   in March of this year, was a major step forward and pretty  
11   quality process. There was areas for improvement, but it  
12   was a quality process.

13          MR. POWERS:       Fundamentally, the  
14   process was sound, but there were areas for improvement.

15          MR. GROBE:       Jim, have you  
16   reflected on why the Corrective Action Team Inspection and  
17   this independent assessment identified problems that were  
18   not identified through your internal processes?

19          MR. POWERS:       Well, I think we  
20   identified a number of issues in the calculation area,  
21   Jack, with our Corrective Action Process. As you mentioned  
22   earlier, many, many Condition Reports issued over the  
23   course of our System Health and Latent Issues Inspections,  
24   and a number of those were in the area of calculations,  
25   that you'll recall, the Collective Significance Assessment



1 that we did with the Latent Issues and System Health  
2 Report, calculations was an area identified that we  
3 identified required improvement.

4 And, I guess what I would point to is the CATI Team  
5 Inspection found broad range of calculations needing  
6 improvement. These were from a time frame, they were  
7 earlier calculations through some of the more current  
8 ones. The A/E Assessment looked at more recent  
9 calculations.

10 I guess if I were to point to --

11 MR. MYERS: That, that was  
12 the reason we commissioned that external evaluation.

13 MR. GROBE: What was the  
14 reason, Lew?

15 MR. MYERS: After you all  
16 completed the CATI debrief at our plant, that's the reason  
17 we did, we hired the outside vendor to come in and do an  
18 independent evaluation of our process. That's what  
19 spirited it. So, I would say the areas that's mentioned in  
20 that report would be, would answer your question.

21 MR. GROBE: Right. I guess  
22 maybe I didn't phrase my question correctly. Many of the  
23 activities that the Corrective Action Team Inspection was  
24 looking at were activities of current engineers performing  
25 current activities, whether it was an evaluation of the

1 breadth of a problem, the depth of a problem, the  
2 assessment of the cause, or implementation of the  
3 corrective actions. These were all current engineering  
4 activities, variety of types. And, found problems with  
5 those, as well as during the course of the inspection found  
6 some problems with the work calcs, but most of the concern  
7 was with current engineering performance.

8 And my question was, what self-assessments or  
9 independent assessments, not independent meaning outside  
10 your organization, but maybe quality assurance or other  
11 assessments, had you performed that missed these issues, or  
12 where maybe you didn't perform?

13 MR. POWERS: I wouldn't say we  
14 had done any, Jack. I guess where I was going in my  
15 response to you, we had assessed a number of calculations  
16 as part of our process and found issues, we knew it was an  
17 area for improvement. We didn't assess every calculation  
18 at the plant. The CATI Team did come in and look at  
19 additional, different calculations that we had as part of  
20 our reviews. We knew we had general area for improvement  
21 based on our assessments in Building Blocks. CATI team  
22 found a similar conclusion.

23 MR. GROBE: Let's go on.

24 MR. MYERS: I don't think we  
25 spent, we did, we put the new program in place in March.

1 And then, you know, that was fairly new. And we hadn't  
2 done an effectiveness review. Well, the CATI Team came in,  
3 and based on the issues we found, which a lot of them I  
4 think had to do with rigor; and so, what we did was, we  
5 sponsored the independent assessment of the effectiveness  
6 of our program; is it a quality program and how are we  
7 making errors? And that's the reason we did that outside  
8 assessment, so that's what drove us to that.

9 MR. POWERS: I would add  
10 something to that, Jack, in terms of the work that we've  
11 done for the new procedure was subsequent to training that  
12 we did on procedure changes. And one of the things that  
13 we've learned through this, is that we did not provide an  
14 example to the engineers of calculations in their areas  
15 that would be a model calculation, so to speak, that's an  
16 action that we're taking.

17 So, it's one thing to train on what the procedure  
18 states is required, and the procedure does provide quite a  
19 bit of guidance, but we believe that by providing some  
20 model standard calculations in terms of how does this look,  
21 what is the expectation for how it will look as a product,  
22 that we will be driving the improvement that we want to  
23 achieve. And that's an element that we're factoring into  
24 our changes, our immediate actions.

25 MR. GROBE: Okay.

1           MR. POWERS:        Okay, next  
2 slide.

3       And so, the immediate actions that we took as a  
4 result of our feedback both from the CATI Team Inspection  
5 and from our independent A/E Assessment was the Design  
6 Engineering Section, how it realigned and reaffirmation  
7 meetings, and this was to go over the procedure types that  
8 are in place at the plant.

9       We have several different levels of procedures. We  
10 have rules about procedural adherence. So, we wanted to  
11 reaffirm and realign on the adherence to our calculation  
12 procedure. We started out with the supervisors, and I'm  
13 sure that we had an alignment at that level between the  
14 manager and supervisors and we carried it down through all  
15 the engineers in the design section who prepare  
16 calculations, and layout what the expectations are.

17       We also reviewed the A/E Assessment results with  
18 them, so that they understood the shortfalls in the  
19 calculations.

20       We also issued a Collective Significance Condition  
21 Report that rolled up the results of the CATI Inspection  
22 findings and the A/E Assessment issues as well; and we  
23 broke those down into each of the technical disciplines  
24 within the design section; by that, I mean structural  
25 engineers, electrical engineers, mechanical engineers, for

1 example. Each one prepares their own type of calculations  
2 and each one got the list of shortfalls in their  
3 calculation area to assess collective significance and what  
4 it meant to the quality of their product.

5 And they assess the effects of the results or  
6 conclusions of the calculations. And what we found in the  
7 majority of cases, and as the NRC presented the findings in  
8 many cases are noncited violations, a significance  
9 determined the level of green; the results in some cases  
10 change. In other words, the bottom line number might  
11 change, but it would be by a small amount such that the  
12 conclusion wouldn't change and there would be no change  
13 required in the plant. That was, on balance, the results  
14 that we got from viewing it.

15 Nevertheless, there was some findings by the team,  
16 applications of certain theories that weren't well  
17 documented in terms of assumption, the using theory, that  
18 the expert engineers on the NRC's team questioned, and they  
19 were good points for us to take and to use in our  
20 calculations to assure appropriate rigor is there.

21 Then, corrective action on that collective  
22 significance includes case studies, as I mentioned, model  
23 calculations, which we think is a learning tool for our  
24 engineers, becoming very important to lay out an example  
25 for them on how a good calculation looks.

1        Good calculation is just like a document. It's just  
2        like a report, for example. It's not just numbers, there  
3        is a lot of text and there is a lot of explanation that  
4        goes into it.

5        Next slide.

6                MR. GROBE:                Before you go on  
7        to the next slide, Jim, I appreciate your comments earlier  
8        of the capability of this inspection team, Corrective  
9        Action Team. It was a very solid inspection, but the  
10       highest performing nuclear utilities, the most aggressive  
11       critic is themselves; and rarely do we come in and find  
12       something that they didn't already know about and already  
13       have improvement activities in place.

14       That's something to keep in mind in evaluating where  
15       you are on this. And I think it warrants some further  
16       consideration on your part. Maybe we can talk about that  
17       some more in December.

18                MR. MYERS:                We've already  
19       taken several actions, you know.

20                MR. GROBE:                Right.

21                MR. POWERS:                That's right. And  
22       along those lines, another leap of action that we took was  
23       the Engineering Assessment Board now has a calculation  
24       review function that is much more specific, with greater  
25       specific objectives they are reviewing and going to be

1 using on detailed review checklists on health procedure to  
2 go over the calcs. They receive each calc under the Design  
3 Interface Evaluation Process, and are going to be reviewing  
4 it in detail for procedural adherence.

5 Also, there is a calculation called Performance  
6 Indicator that they will be providing for us, so we can  
7 track this area performance and improvement in this area.

8 MS. LIPA: Jim, was the A/E  
9 already reviewing calcs and now they're going to review  
10 them differently?

11 MR. POWERS: Yes, they reviewed  
12 calcs as part of modification packages, for example, and  
13 they would review calculations at an upper level to see  
14 that the calculation provided the appropriate technical  
15 support for design package; however, they did not do a line  
16 by line check with, against procedural adherence, and we  
17 expect that from them now. We're really turning up the  
18 calibration on this aspect of the A/E review, and have them  
19 review them differently than they had in the past.

20 MS. LIPA: Is the A/E an  
21 interim measure or is that a long term measure?

22 MR. POWERS: Long term.

23 MS. LIPA: Thank you.

24 MR. POWERS: We also put a, a  
25 requirement to validate older calculations prior to use.

1 This has been a practice at the site, when you're preparing  
2 a modification package, doing a technical assessment, then  
3 you pull out a calculation, calculation could be older or  
4 newer, but particularly for the older ones, it is required  
5 to validate that the results are still current; that the  
6 inputs are still current to it, things haven't changed at  
7 the plant, such that the calc results may have been  
8 affected.

9 So, we have a requirement in place to do that. We  
10 think that will help the quality our calculations as well.  
11 As we do work and touch calculations, we'll be assessing  
12 the quality and improving it.

13 The final bullet on the page is a very important one  
14 to us; the Electronic Calculation Index and our ATLAS,  
15 Electronic Design Basis Information Projects. We have  
16 funded both of those projects; and in particular, the  
17 design or Calculation Index Project was one that we really  
18 put in high gear as a result of feedback that we got from  
19 our systems, as well as CATI. And we've initiated both of  
20 those projects.

21 Now, the Electronic Calc Index is important for one  
22 very fundamental reason, which I have been wanting to  
23 explain, and that is, for the staff at the plant that works  
24 within procedures, whether they're maintenance procedures  
25 or operator procedures or surveillance structures which are



1 simply tests of equipment. In many cases those procedures  
2 have numbers in them that are acceptance criteria; a pump  
3 needs to pump so many gallons per minute.

4 In most cases there is a calculation that provides  
5 the basis for that number. And this Electronic Calculation  
6 Index is going to provide us linkages between the  
7 calculations and those procedure products to make sure that  
8 as calculations are changed, that the products are also  
9 updated and kept in very strict configuration and design  
10 control.

11 So, we achieve that now through a Design Interface  
12 Evaluation Process, but this Electronic Calculation Index  
13 is going to take us to a much higher level. It's going to  
14 help the quality of the product of the engineers. It's  
15 currently in place at our Beaver Valley unit. We've got  
16 the same group of individuals who put them in place.  
17 They're helping us now and actually loading calculations  
18 into it. So, we're making good progress on this action  
19 now.

20 Then, finally, the Calculation Improvement Plan. We  
21 have created a Calculation Improvement Plan as part of our  
22 Operational Improvement Plan Initiative, we touched on a  
23 bit earlier. The Operational Improvement Plan includes  
24 many areas of the plant organization that we're going to be  
25 continuing to improve specific initiatives into the

1 future.

2 We have details in our Design Basis Assessment  
3 Report. And we have two reports at plant engineering that  
4 document our progress, if it's performance indicators and  
5 give us plans going forward for continued improvement. One  
6 is a System Health Report for the systems in the plant, and  
7 the other is Design Basis Assessment Report for design  
8 basis activities and projects.

9 We have this Calculation Improvement Plan details in  
10 that report. We'll be grading its performance and tracking  
11 its performance on a more regular basis for that report.

12 The project includes procedural improvements and  
13 we're making those procedural improvements now. Additional  
14 ones, based on input from the A/E assessment, the  
15 calculation procedure owner, and the corporate headquarters  
16 is leading that effort, and the calculation procedure  
17 improvements will be applicable to all three of our  
18 plants.

19 We will also be implementing performance improvement  
20 for our implementation of the calculations; how we do the  
21 calculations and their quality. And we're going to be  
22 identifying what we refer to as critical or tier one  
23 calculations in our index and then the project will go  
24 through those and assess them to make sure they meet the  
25 high quality standards. That may require a revision of

1    them, of some of them to ensure they meet the latest  
2    standard. So, we also think that is going to be a major  
3    improvement to provide high quality calculations at the  
4    plant.

5           Then, in summary, in this area of Calculation  
6    Improvements, our System Health Building Block Review has  
7    been completed. We've reviewed the systems, safety  
8    significant systems and their design basis calculations and  
9    support the safety function.

10           The determination from that review is that the  
11   system design bases support the restart of the plant. And  
12   we've put barriers in place to ensure calculation quality  
13   is meeting our expectations, based on feedback we've gotten  
14   from both CATI Inspection and the A/E Assessment. And  
15   we're anchoring those barriers to assure that our quality  
16   is improved now. And we have continuing improvements  
17   ongoing.

18           That will be part of our Operational Improvement  
19   Plan. There is a number of things we have started;  
20   projects, such as our calculation, electronic calculation,  
21   based on our ATLAS Design Basis Information System. We've  
22   already started them. They'll be proceeding on into the  
23   next year.

24           Any questions?

25           MR. HOPKINS:           Yeah, I have

1 questions. In your summary, the second bullet, System  
2 Design Basis Support Restart. Have there been any  
3 calculations, licensing basis calcs identified to date  
4 specifically talking about something like technical  
5 specification set points that would need to be changed  
6 prior to restart?

7 MR. POWERS: We had, there was  
8 one issue that came out from the CATI Inspection on the one  
9 set point that needed to be changed. In fact, I'm not  
10 entirely sure if it's CATI, I think it was through your  
11 Latent Issue Review. We had one set point that was  
12 nonconservative. We changed that set point and we'll be  
13 submitting for the tech spec change, but that was just one,  
14 that I recall.

15 MR. HOPKINS: So, do you think  
16 that this will be submitted like early December or  
17 something for the set point change then?

18 MR. SCHRAUDER: Jon, we'll follow  
19 the guidelines. We discussed this on previous meetings,  
20 and that is the tech spec itself was nonconservative in  
21 this case, so the actual implementation in the plant right  
22 now is, is appropriate.

23 MR. HOPKINS: Okay, then I  
24 misunderstood what Jim said. So, you're operating in the  
25 conservative manner, and the set point calcs done are

1 helping you in that regard.

2 MR. POWERS: Right.

3 MR. HOPKINS: You need to change  
4 the tech spec, and that could probably be done in  
5 accordance with our procedures, which could be after  
6 restart.

7 MR. POWERS: Right.

8 MR. SCHRAUDER: Right.

9 MR. RULAND: You're operating  
10 within the administrative letter at this point.

11 MR. POWERS: That is correct.

12 MR. GROBE: Okay, hang on,  
13 Bob. I was letting everyone else go first.

14 Many of these, Scott's accusing me of needing more  
15 space here, but I have trouble getting the broader focus  
16 unless I can see all of it at the same time.

17 Many of these issues are what I would call  
18 mechanistic improvements. And, that's good. Those are  
19 important. And, they will improve the mechanism of  
20 preparing calculations, consistency and quality of  
21 calculations, consistency in the documentation of the  
22 calculations. And maybe this crosses over somewhat to the  
23 presentation Bob's going to go into, but I quickly looked  
24 through the slides and I'm not sure it's there.

25 It seemed to me, the panel spent three meetings on

1 just these Corrective Action Team Inspection findings, and  
2 in going through the details of those findings, it seems to  
3 me that there is another issue. It's what I refer to as a  
4 thinking issue, not a mechanistic issue, and that is the  
5 focus, problem-solving focus.

6 And I'm wondering if it warrants some consideration  
7 as to whether or not in the documentation of the extent of  
8 the deficiency, one thing is observed, but there might be,  
9 you know, if you think a little more broadly, there is two  
10 things that you should document in the conduct of an  
11 apparent cause; the breadth of the problem-solving focus  
12 and the evaluation of the calculation.

13 Again, and I think the strongest problem-solving  
14 focus documents seen recently is your procedure where you  
15 get all of your various people together focusing on a  
16 problem and it forces a breadth of thinking.

17 I'm wondering if that played some role in this  
18 issue, and that softer issue, not mechanistically focused  
19 issue, but that softer issue is something that warrants  
20 some consideration?

21 MR. POWERS: I would say yes,  
22 Jack, and our Problem-Solving Decision-Making Procedure is  
23 right along those lines. And we put that into a lot of use  
24 during the past several months at the plant. And I think  
25 it is giving the staff that broader view in solving

1 problems. In fact, it requires them as they work through  
2 the process to list out the many different possibilities  
3 and think broadly on it.

4 And Bob is going to touch on that in terms of our  
5 Apparent Cause Condition Report thinking.

6 MR. MYERS: We have a team  
7 together today on service water.

8 MR. POWERS: That's right. One  
9 of the problem-solving teams is together at the plant right  
10 now looking at service water flow balance results and some  
11 of the discrepancies that we have there.

12 So, we've had a problem solving team in place. I  
13 would say just about each week we have an issue that comes  
14 up, and we assign the team and work through that process.  
15 So, the staff is getting accustomed to working within that  
16 process. I think that's going to improve the critical  
17 thinking and breadth of the thinking in problem solving.

18 MR. GROBE: Right, and I  
19 appreciate that, but that's when you get many minds  
20 together. Most of these issues are individual performance  
21 issues. I'm wondering if maybe there is some consideration  
22 necessary of finding a way of more rapidly driving down  
23 that broader problem-solving focus than just allowing  
24 people to be involved in problems that have to be solved.

25 MR. POWERS: And there is a

1 mechanism for that as well. It's part of the Engineering  
2 Assessment Board Reviews, where they review each problem  
3 which is associated with individuals, and provide the  
4 feedback on a scoring mechanism to the supervisors. So,  
5 that mechanism, Jack, had direct feedback on the quality of  
6 products, is there, is in place.

7 MR. GROBE: Okay. Well,  
8 overall, did you have a question, Christine?

9 MS. LIPA: No.

10 MR. GROBE: Overall, I think  
11 I identified two issues I need to think about in a little  
12 more depth; one is the role of self-assessments,  
13 effectiveness reviews, and nuclear quality assurance  
14 oversight in finding your own problems; and the second is  
15 this issue on problem-solving focus in the improvement of  
16 engineering. I need to ponder that a little more. I'll  
17 probably be talking with you people more on it.

18 MR. RULAND: Jim, can I come  
19 back to the original question I had when you started this  
20 discussion, and you made the comment on the majority of the  
21 calculations? I would like to give you maybe an  
22 opportunity to clarify or elaborate a little on this.

23 I think at the time the CATI was performed, there  
24 were no calculations identified that even we identified and  
25 subsequently you identified that demonstrated that, that



1 called into question the operability of the system,  
2 correct?

3 MR. POWERS: That's correct,  
4 Bill. My recollection, that the listing of the issues we  
5 went over this week from CATI, I don't believe we had an  
6 issue that was called into question on the operability.

7 MR. RULAND: And you brought up  
8 the ETAP and electrical calculations, and that was  
9 something essentially you'd already been working on, and  
10 while there might be previous calculations that were  
11 deficient, at least at this stage in your 21-month plus  
12 outage, you haven't found any major problems associated  
13 with the calculations, but rather we're talking about  
14 refining and improving and honing your calculational  
15 processes at this stage.

16 MR. POWERS: Thank you for that  
17 clarification. That, in fact, is the case.

18 What we did as part of the System Health Building  
19 Block, out of that the Design Issues, called History of Our  
20 Dialogue, and this is to review, how had the design basis  
21 of the plant been surveilled over the years, both in  
22 complying with our own oversight assessment, as well as  
23 externally, and what was the history of the various  
24 inspections, audits, and assessments that occurred.

25 And we found going back into the mid 80's time

1 frame, historically, that there was very, very active  
2 surveillance of the design basis of the plant. That means  
3 calculations, looking at the results. So, we had been  
4 scrutinized over the years.

5 And so, that's true, we did not find substantive  
6 issues. We found a number of areas where we need to  
7 improve rigor.

8 MR. RULAND: And I don't mean  
9 to make light of what we have found. I think what the CATI  
10 found are important issues and they need to, you, you need  
11 to address them and address them aggressively. I'm just  
12 trying to tell it like it is, rather than go one way or the  
13 other, okay, that was my goal.

14 MR. POWERS: There was nothing  
15 that caused us to go make any physical changes to any of  
16 those calcs. They were good issues. One area we looked  
17 at, we assumed, ideal gas line, other guy assumes something  
18 else. So, there are things that engineers could question,  
19 they were good issues, but when we looked at it, the mod we  
20 made, went from a 30-minute supply to 30-day supply, so we  
21 had a lot of margin. So, there was nothing that made us go  
22 make any hardware changes.

23 MR. RULAND: Thank you.

24 MR. GROBE: That's why all the  
25 findings were of low significance.

1 MR. MYERS: Yeah.

2 MR. GROBE: The problem is  
3 that engineering can be a, a silent problem.

4 MR. MYERS: That's right.

5 MR. GROBE: That doesn't get  
6 you until you need a piece of equipment to function in a  
7 certain configuration and a certain time and it doesn't  
8 function. And that's why the self-assessment,  
9 self-identification process is so very important. And  
10 there is many components to that.

11 Rarely does an engineering inspection identify  
12 problems where you actually have to go out and make a  
13 physical modification to the plant, but there are times,  
14 and they're not very often, but there are times when  
15 engineering inspections lead you to a concern that has  
16 sufficient breadth and warrants attention, and that's where  
17 we are right now. That if this issue is not resolved, it  
18 could result in a safety violation.

19 And so, not only do we want to see what you're doing  
20 to address the immediate problem, but what you're doing to  
21 make sure that we don't find these problems in the future.

22 MR. MYERS: You know a couple  
23 things we put in place, one of them is our program reviews  
24 and one is our Latent Issues Review. That's been a  
25 powerful tool for us at our other plants.

1       What I would comment on, you know, the Latent Issues  
2   Review Program at our other two plants, and the, we use  
3   that here, in our program reviews. What that caused us to  
4   do is physically make changes that improve the safety  
5   margin of the plant. So, it drove us to physically make a  
6   lot of changes. We made the changes. We think it's a  
7   healthy process.

8       But these were, none of these issues, once again,  
9   had enough margin that did cause us to make physical  
10   changes, you know. But they're serious, we're going to  
11   take them on. We've already taken on a lot of it. We  
12   didn't wait for this meeting to take on these issues.

13       We've already done an independent assessment. We've  
14   already put the administrative controls in our old calcs  
15   and stuff like that. So, we've already taken a lot of  
16   actions. Thank you.

17       Bob.

18           MR. SCHRAUDER:       Okay. As this  
19   slide shows, I am the Director of Support Services at  
20   Davis-Besse; and in that capacity, one of the functions  
21   that I have is what I'll call Process Administration for  
22   the Corrective Action Program, and that's the reason I'm  
23   speaking to these findings today. I'm also the Chairman of  
24   the Corrective Action Review Board at the site.

25       As Jack had identified, we have in our Root Cause

1 Analysis for the hole in the reactor vessel head,  
2 deficiencies in implementation particularly of the  
3 Corrective Action Program was found to be a key contributor  
4 to the events which led to that degradation.

5 In response to that, we performed two root cause  
6 analyses; one on the process, the program corrective action  
7 itself, which is a FENOC process, as well as a separate  
8 root cause analysis for implementation at the site of that  
9 program.

10 We did have some process changes that we made, but  
11 not a whole lot. The program was fundamentally sound if  
12 effectively implemented, but we did make some program  
13 changes; and those changes, the new procedure, FENOC  
14 procedure for corrective action went into effect March of  
15 this year.

16 We have seen, I believe the CATI Team would agree as  
17 our QA Organization did and our own self-assessment, that  
18 they have observed improvements in our implementation, but  
19 they also identified, as we know, several areas that we  
20 still need additional improvements in and require our  
21 ongoing focus.

22 Today, I would like to spend a few minutes on some  
23 of the actions we have taken and some new actions that were  
24 taken, and specifically concentrate on those areas where  
25 weaknesses have been identified in this inspection and in

1 our self-assessments.

2 The first issue I want to talk about is the quality  
3 of our Apparent Cause Evaluations. Before I go into that,  
4 let me say that our Root Cause Evaluations fundamentally we  
5 believe are fairly good. They're solid investigation.  
6 When we do root cause investigations, we do a good job of  
7 getting to the root cause. Obviously, we need to continue  
8 focus in that area, but it's not an area where we feel is a  
9 weakness for us right now. In fact, we think they're  
10 pretty good.

11 MR. GROBE: Let me just  
12 comment on that. We have had an opportunity to look at  
13 your Root Cause Evaluations in many of our inspections.  
14 Jeff Wright's here, he's the leader of the Management/Human  
15 Performance Area Inspection. And, back maybe over a year  
16 ago, the weeks turn into months, turn into years. About a  
17 year ago, I think, he identified some concerns with a root  
18 cause, and you did some further work and found that further  
19 work was acceptable. You did an extensive root cause in  
20 the Radiation Protection area, which we found was good.  
21 And you've done root causes in a number of areas which  
22 other inspections have touched on.

23 This inspection identified some problems with root  
24 causes, but I think by and large we agree that the root  
25 causes are as I stated earlier, are not a significant

1 problem. So, our root cause assessment has seen many  
2 different inspections that we've conducted over the last  
3 year and a half.

4 MR. SCHRAUDER: However, your team  
5 and our self-assessments did find some problems in quality  
6 of our Apparent Cause Evaluations.

7 Some of the things that we've done, I'll call this  
8 first one an interim compensatory action, if you will,  
9 while we get some additional training completed. That is,  
10 since we've implemented the new procedure, the Corrective  
11 Action Review Board is reviewing all Apparent Cause  
12 Evaluations.

13 We have seen in our reviews that the quality is  
14 improving, and it has consistently improved since the new  
15 procedure went into place. It's not yet where we want it  
16 to be, but it is improved.

17 We have had several enhanced, enhancements to the  
18 procedure that maybe address some of the broader viewpoints  
19 and the like. That is, the procedure now requires for one  
20 thing, you have to identify the type of analysis that  
21 you're using. You can't just say, well, this is the  
22 apparent cause and what occurred. There is a simplified  
23 method, but some defined simplified methods identified in  
24 the procedure you have to go through and you have to  
25 identify which method you used to come up with your

1    apparent cause.

2            The procedure also requires a Generic Implications  
3    Review and Extent of Condition Review for an apparent  
4    cause. We look at past site and industry occurrences and  
5    how they relate to this particular event, and then we have  
6    provided a quality checklist in the procedure itself that  
7    evaluates, you can go down through and check off, yeah,  
8    I've covered all of these attributes that should constitute  
9    ~~then~~ an effective apparent cause.

10           One of the things, another thing that we're doing  
11    is, I also call this an interim compensatory measure. We  
12    are providing additional training to apparent cause  
13    evaluators. In the interim we will have a select group of  
14    apparent cause evaluators, so a very much smaller  
15    population.

16           What we have found is that you could train as much  
17    as you want and provide good training and good procedures.  
18    Some people are more adept and better at doing cause  
19    analysis than others. So, we want to reduce the  
20    population, particularly while we provide additional  
21    training. So, we'll have a select group of apparent cause  
22    evaluators, a core group, if you will, that will do  
23    apparent cause evaluations.

24           I'm expecting that that group of cause evaluators  
25    will work within the Support Services Department. We will



1 still require owner, supervisors, and managers to be in the  
2 review and approval process for those cause analyses,  
3 because we don't want to take ownership of a program out of  
4 those individual sections.

5       Going forward, the apparent cause evaluators will  
6 have to have, what I'll call, a job familiarization guide.  
7 They will have to be qualified apparent cause evaluators.  
8 And that qualification, training that will be done is being  
9 developed under the systematic approach for training. It  
10 would require initial training, and it will require  
11 continued training.

12       And, in addition, there will be proficiency  
13 requirements that the apparent cause evaluators have to  
14 demonstrate by practice that they can do effective apparent  
15 causes. And they will have to have ongoing proficiency  
16 requirements. That is, they will have to do a certain  
17 number of effective cause analysis in a period of a year to  
18 maintain their qualification.

19       The training will be piloted this November, and  
20 we'll do a lot of training in December and finish it up in  
21 January. And, obviously, the first group that will go  
22 through this is going to be our select group of apparent  
23 cause evaluators. Then, we'll expand the population, but  
24 we will not expand the population as large as it has been  
25 in the past.

1       We also are strengthening the roles and  
2 responsibilities for our Condition Report Analysts. These  
3 are individuals placed within the section themselves that  
4 do reviews in advance of it going to the manager for their  
5 approval and in advance of it coming to CARB; where they  
6 make sure that the procedure has been followed, there is a  
7 clear and concise statement of the problem, a clear and  
8 concise linkage to the cause of the problem, and a clear  
9 and concise linkage to the corrective action that will  
10 correct the problem and potentially prevent it from  
11 occurring in the future.

12       In the long term, this group of Condition Report  
13 analysts, who will get the same training as the evaluators,  
14 will take on responsibility over the long term as a  
15 subcommittee of the Corrective Action Review Board.  
16 Corrective Action Review Board has by its charter  
17 responsibility to monitor apparent cause evaluations, but  
18 not to review and approve all of them. We will do that by  
19 subcommittee with the CR analysts.

20       In the interim, what we're doing with the analysts,  
21 they are also attending the Corrective Action Review Board  
22 meetings now, so they can see the types of questions and  
23 probing that the Corrective Action Review Board does.

24       As I said, in this next slide, we have seen since we  
25 implemented the new procedure and since we have had CARB

1 reviewing causal analysis, apparent causal analysis, that  
2 we have seen increasing improvement and quality in the  
3 apparent causes as they come into CARB.

4 Our long term goal is to have a minimum of 90  
5 percent acceptance rate. That is the first time it comes  
6 to CARB, it is accepted versus rejected. We're currently  
7 at about 85 percent acceptance rate when they come to  
8 CARB. So, we have seen consistent improvement in the  
9 quality of the apparent causes that come to us.

10 Another area I want to talk about is Documentation  
11 Quality. Jack, other than engineering issues that we did  
12 identify rigor and that, there were other documentation  
13 quality issues that the CATI Team pointed out to us.

14 And one of their comments was that we had to  
15 frequently go to the evaluator and talk to them to get the  
16 full story of what you really looked at and what you did,  
17 and you can't pick up the Condition Report Evaluation and  
18 read it and understand everything that has been done. We  
19 had seen some of that also.

20 What we did with that, we also saw instances in  
21 documentation where a corrective action was written,  
22 corrective action was closed. And when you went to pull  
23 the string on how was it closed, in some cases it was  
24 closed with maybe an equivalent type of action, but not the  
25 exact action that the corrective action called for;

1 and then no discussion in the document itself as to why  
2 that was acceptable or appropriate and who approved the  
3 fact that it didn't document or it didn't do specifically  
4 what the corrective action said you were going to do, but  
5 you closed it anyway.

6 What we did, we have enhanced the procedure in that  
7 regard, in that you cannot any longer, and this occurred  
8 too, you can not close a corrective action that comes from  
9 a condition adverse to quality to another document and then  
10 close your Condition Report. That is, the action that  
11 needs to be taken has to be completed. You can't say, I  
12 wrote a work order to get it done. It's in the schedule to  
13 get done. Therefore, I closed the corrective action.

14 We found cases of that. Or I don't write corrective  
15 actions anymore that says, initiate an engineering change  
16 request; change this. The activity that you want changed  
17 has to be completed before you close the corrective  
18 action. And that's been proceduralized.

19 MR. GROBE: Bob, does that  
20 mean that you're not continuing the practice of rolling  
21 over one Condition Report to another Condition Report?

22 MR. SCHRAUDER: I'm going to talk  
23 about rollovers also, Jack. As a matter of fact, I'll talk  
24 about it now.

25 Another issue that was very frustrating, I'll say,

1 not only to your CATI Team Inspectors, but to others that  
2 have come in and tried to follow the trail of a rollover.  
3 The rollover is where a condition is identified in one  
4 Condition Report, and then another Condition Report that's  
5 felt to be very similar in nature, you roll this one in,  
6 you know, Condition Report A into Condition Report B.

7 What was occurring was, and then Condition Report A  
8 plus B was rolled into Condition Report C. And it was a  
9 very difficult process to get to the end of; where did you  
10 finally roll this thing to, and was it adequately  
11 resolved.

12 We have strengthened the procedural requirements for  
13 rollovers. I would tell you that was kind of a moment in  
14 time, where we were using a lot of rollovers. And most of  
15 them were really in the Containment Health walkdowns, where  
16 much of that occurred.

17 So, we're not seeing a lot of rollovers, number one,  
18 right now. And, secondly, the procedure now requires some  
19 stipulations on that; it can only be rolled once now. So,  
20 you can't roll and roll and roll, it can only be rolled  
21 once.

22 The other, I'm going to say interim also  
23 compensatory measure is, I've asked for any rollover  
24 Condition Report, whether it's a fix, you know, condition  
25 adverse to quality fix or apparent cause or root cause, any

1 rollover has to come to the Corrective Action Review Board  
2 now, so we can see that it's appropriately rolled and  
3 follows all of the guidance for rollovers.

4 So, we believe we have that well under control now  
5 and we're not, like I said, we're not rolling a lot of  
6 Condition Reports at all right now.

7 We took the Lessons Learned on Documentation and we  
8 provided that feedback as we got it from the Corrective  
9 Action Team Inspection. We didn't wait until that whole  
10 inspection was over when we got these feedbacks from them  
11 on documentation concerns. We provided informational  
12 training to all supervisors and above that were in the  
13 review and approval process of Condition Reports about what  
14 kind of problems we were seeing in the documentation.

15 We have now also, I spoke about the Condition Report  
16 Analysts, that is one of their functions also right now to  
17 look at the technical linkage on the Condition Reports for  
18 quality, and also our performance improvement unit  
19 reviews. And their reviews, I'm going to say, were more  
20 administrative type, where they look for adequate closure  
21 documentation and the codings for trendings are appropriate  
22 in the cause analysis.

23 Another area that I would like to talk about is  
24 management involvement in the process. It's an area we  
25 continued to focus on. We have issued a business practice,

1 which is kind of in a question and answer format that the  
2 management team appreciate, kind of addresses some commonly  
3 asked questions and gives guidance on what the expectations  
4 are. It does not, it's not procedural requirements, but it  
5 helps when you're going through an actual evaluation of the  
6 kinds of things I look for. So that's been well received.

7 We've reinstated the Management Communication  
8 Teamwork Meeting. We went through the outage, we were in  
9 an outage situation for an extended period of time and our  
10 normal management meeting, what we call the 8:00 meeting or  
11 the Management Communication Teamwork Meeting, was  
12 suspended in lieu of an Outage Turnover Meeting at 6:30 in  
13 the morning and 6:30 in the evening.

14 The responsibility, the procedural responsibility  
15 for management review of incoming Condition Reports was  
16 given to a subset of managers. We still did a management  
17 review, but it was combined with the responsibilities of  
18 Restart Station Review Board.

19 We've reinstated the morning meeting, the 8:00  
20 meeting. We bring in all new Condition Reports into that  
21 meeting. And what that really does for you, two things.  
22 First, communicates across the management team what are the  
23 issues that you're seeing on a daily basis. You get a much  
24 better collegial discussion, because the owner organization  
25 discusses their conditions adverse to quality, gives a

1 brief description of it, clearly identifies who the owner  
2 of the condition is, is it appropriately categorized, and  
3 is it set for timely resolution by its due date.

4 The Section Managers discussed earlier that the  
5 Corrective Action Review Board was looking at all apparent  
6 causes. One of the things that we require is that the  
7 Section Manager was responsible for that apparent cause.

8 We lump them together, so for instance we might look  
9 at all the Design Engineering apparent causes, you know,  
10 six or seven of them at a single meeting. The Design  
11 Engineering manager is required to be at that meeting along  
12 with his analyst when we go through those, so they get the  
13 direct feedback from the review board as to any  
14 shortcomings or questions that we might have on their  
15 apparent causes.

16 We are doing a review. As you know, the Restart  
17 Station Review Board identified certain Condition Reports  
18 that had to be evaluated prior to restart, certain  
19 corrective actions that had to be done prior to restart,  
20 and certain ones that could be deferred, that didn't have  
21 to be done to support restart.

22 The Management Team now, we're going back and  
23 looking at all of the open Condition Reports, all the  
24 Condition Report evaluations that still need to be done and  
25 all the corrective actions to take a look at the collective



1 significance, if you will, of the aggregate of the number  
2 of open Condition Reports we have, the timing of when  
3 they're going to be performed, and assurance that they'll  
4 have adequate resources to go through that. So, we're  
5 getting management involved in that also.

6 Our procedure now requires all significant  
7 conditions adverse to quality to come to the Senior  
8 Leadership Team at the site. And this, I'll say, is not an  
9 in-line review in depth, you know, process and everything,  
10 but it's a knowledge type of thing where the Senior  
11 Leadership Team gets a succinct discussion of, "Here is the  
12 issue we dealt with. Here is what we found was the cause  
13 of the issue. And here are the corrective actions that  
14 we're putting in place."

15 We understand particularly the significant issues at  
16 the site and can render some judgment as to whether we  
17 believe, based on that discussion, that effective  
18 corrective actions are being taken and being taken in a  
19 timely fashion.

20 In addition to that, the Chief Operating Officer,  
21 Lew, reviews significant conditions adverse to quality for  
22 a decision on whether he would like to take them to the  
23 Executive Leadership Team, all the other vice-presidents of  
24 the FENOC sites and the Engineering Executive Vice  
25 President, Gary, for their discussion where there may be

1 some issues that perhaps arise at Davis-Besse that could  
2 impact the other two sites. So, he reviews the significant  
3 conditions adverse to quality for that discussion.

4 Finally, another new thing that we've just decided  
5 to do and have not yet incorporated into their charter, is  
6 that the Corporate Nuclear Review Board will do an  
7 independent review of select and apparent causes. They're  
8 not going to look at them all, but they will -- and that  
9 will help us particularly, can a person, knowledgeable  
10 technically oriented person pick up this Condition Report  
11 and clearly understand what the issue is, clearly  
12 understand how we came about arriving at the apparent  
13 cause, and clearly see that the corrective actions are  
14 being taken which would correct the problem.

15 So, we'll be revising their charter. They're  
16 already targeted to looking at conditions adverse to  
17 quality, but we'll add in some apparent cause evaluations  
18 for them also.

19 MR. GROBE: I realize you  
20 haven't fully incorporated this yet, but do you have some  
21 thought as to how they would select which apparent causes  
22 they are going to look at?

23 MR. SCHRAUDER: I thought about it  
24 a little, but not in a great amount of detail. I think  
25 what we will do is give them the titles of all the apparent

1 causes that were written and let them select the ones that  
2 they would like to look at.

3 Okay. The next issue I would like to talk about is  
4 Trending. That was an issue that was identified in the  
5 CATI. I guess, that did not come as a surprise to us. We  
6 knew, and it was a conscious decision made, you know, in  
7 the period of this extended outage that we suspended the  
8 trending.

9 We were doing a lot of what I will say  
10 self-assessments by way of whether it's a safety function  
11 validation, containment health walkdowns, system health  
12 reviews, all of those were providing us a lot of  
13 information. A lot of what we were finding was in fact  
14 historical latent-type issues.

15 Now, what we weren't able to do in that process and,  
16 certainly, we could look back at our decision and say, we  
17 maybe should have continued to do it for ongoing types of  
18 procedure, adherence-type issues, trending human  
19 performance type activities.

20 Nonetheless, we made a conscious decision to suspend  
21 trending. We have resumed trending. We just recently  
22 issued our first, what will be a quarterly trending  
23 report. This one covers from the second quarter of 2002  
24 through the second quarter of 2003. Shortly, we will issue  
25 the third quarter of 2003 trending report, and then within

1 30 days of the, and completion of a quarter, we will issue  
2 our quarterly trend report.

3 I will tell you that this first trend report is  
4 more, it's not exactly what I would call, what our future  
5 trend reports will be, but more of a compilation of, this  
6 is what we have found in this period by way of design base  
7 opportunities, procedural adherence opportunities, and the  
8 like. So, it's more of a tabulation than it is a true  
9 trend report.

10 MR. GROBE: You said that  
11 report covers four quarters?

12 MR. SCHRAUDER: Excuse me, Jack?

13 MR. GROBE: It covered?

14 MR. SCHRAUDER: Four quarters,  
15 second quarter of 2002 through the second quarter of 2003.

16 MR. GROBE: Those were pretty  
17 busy quarters.

18 MR. SCHRAUDER: Yes, they were.

19 MR. GROBE: I can understand  
20 how it would be difficult to try to develop trends through  
21 that time period.

22 MR. SCHRAUDER: Right. The trend  
23 report does cover equipment issues and it does cover, I  
24 don't know whether, administrative issues or human  
25 performance issues, but the real added trending report is

1 the System Health Report. That really looks at more system  
2 and equipment type things. And we have resumed the System  
3 Health Reports, also the third quarter System Health Report  
4 has recently been issued.

5 With regard to equipment reliability when trending,  
6 we have named a FENOC-wide Manager of Equipment  
7 Reliability, who also looks at equipment trends across the  
8 three to see what we're seeing.

9 In addition, our ~~CRES~~ CREST tool, which is a database-type  
10 tool, is our administrative tool for the Corrective Action  
11 Program. We have created an interface for a statistical  
12 process control.

13 Hard as we tried, there are going to be procedural  
14 noncompliances at the plant. There are going to be human  
15 performance errors. And they're going to occur at some  
16 given rate, statistically you can verify that.

17 What the statistical process control element does,  
18 is it will help us focus, so you don't have to rely on  
19 peoples memory as much, haven't we had an increasing trend  
20 in procedure compliance, let's just use that. The  
21 statistical process control or CRES will tell you, hey, you  
22 have a blip in here, you better go check it out.

23 Our performance improvement unit right now uses this  
24 interface to help identify to the 8:00 meeting where  
25 they're seeing trends occurring. That's a fairly new

1 interface, and certainly I wouldn't say it's a mature  
2 condition yet, but it will be helpful for us in early  
3 identification of trends from the Corrective Action  
4 Program.

5 MR. THOMAS: Bob, just real  
6 quick question. Are your, is your population of cause  
7 codes small enough to effectively glean out trends? I'm  
8 not asking my question very well I don't think.

9 MR. SCHRAUDER: I think you asked  
10 it okay. I think the cause codes identified in the  
11 Corrective Action Program, and the ability to go sort the  
12 different codes are fine.

13 MR. THOMAS: One problem can be  
14 if you have too many codes and you can put one bean in each  
15 pot and that doesn't tell you anything. Likewise, you can  
16 have too few to where you -- has that been looked at?

17 MR. SCHRAUDER: I have to look in  
18 more detail. I haven't really looked to be honest with you  
19 to answer the question effectively, but my sense is that we  
20 have a good distribution of cause codes and should be able  
21 to trend effectively on.

22 MR. THOMAS: And there is  
23 training for the people that use those cause codes, so  
24 uniform application?

25 MR. SCHRAUDER: Cause code

1 training is being done and will be included in the  
2 additional training that we're going to provide. And it's  
3 one of the things that the Performance Improvement Unit  
4 specifically looks at in their closure evaluation.

5 MR. THOMAS: Okay.

6 MR. SCHRAUDER: But it is very  
7 important, you're right, to have uniformly done,  
8 consistently done, and at a population where you can  
9 effectively train on.

10 MR. THOMAS: Okay, good,  
11 thanks.

12 MR. SCHRAUDER: The other thing  
13 we'll be planning on doing as part of the self-assessment  
14 process, is to move down, like the quarterly report is a  
15 site-wide report. The sections will also be asked to look  
16 at some periodicity, what are the Condition Reports in our  
17 section telling you that you specifically in your section  
18 ought to be paying attention to.

19 So, in summary, I would say, we believe FENOC has a  
20 good Corrective Action Program. We've benchmarked it in  
21 the industry. We have had, recently, in fact, after the  
22 corrective action team, an industry group of experts come  
23 in to look at our program again. And always interested in  
24 what's your current implementation look like, you know,  
25 over the last several months.

1        They have commented, we believe we have a good  
2    Corrective Action Program. It's got all the requirements  
3    that you would want to see in a Corrective Action Program.  
4    And implementation of the Corrective Action Program is  
5    improving and it continues to improve, but it still  
6    warrants continued management attention and focus and still  
7    has improvement opportunities available.

8        The actions are taken to assure that we are ready to  
9    restart. I told you as a compensatory measure the CARB  
10   will continue to review Condition Reports, with specific  
11   criteria we're looking at until such time as we believe the  
12   quality is there and the CARB can now monitor it by way of  
13   a subcommittee.

14       We have increased the management involvement in the  
15   process. We are reducing the number of qualified apparent  
16   cause evaluators to a core group. Again, as an interim  
17   compensatory measure while we train the entire population  
18   to the level that we want for apparent causes.

19       We are strengthening, providing the same training,  
20   strengthening roles and responsibilities of analysts that  
21   can work within the section to help the managers and  
22   supervisors with some of the administrative and technical  
23   issues in their Condition Reports. And we have added a  
24   Corporate Nuclear Review Board independent review of  
25   selected apparent causes.



1 MS. LIPA: Bob, I know that  
2 we've been talking about Corrective Action Program for many  
3 months, and one of the things I'm trying to do is come up  
4 to speed a little bit on; did your early root cause and you  
5 had a bunch of actions that were in place, like who  
6 oversees the CARB, right, and management involvement. We  
7 talked about that a year ago.

8 MR. SCHRAUDER: Right.

9 MS. LIPA: So, as a result of  
10 the CATI, which one of these are new?

11 MR. SCHRAUDER: CNRB review is  
12 new.

13 MS. LIPA: Is that going to  
14 be done before restart or is it already done?

15 MR. SCHRAUDER: Well, it will be  
16 added to their charter before restart and I believe they  
17 have a meeting at our site in December. We would expect  
18 them to look at some. Whether it's completed in their  
19 charter or not, we will provide them with some apparent  
20 causes to review at that time.

21 MS. LIPA: Okay. So that one  
22 is new and it's planned before restart.

23 MR. SCHRAUDER: Yes.

24 MS. LIPA: Okay, what else?

25 MR. SCHRAUDER: The core group or

1 select group of cause evaluators will be completed prior to  
2 restart.

3 MS. LIPA: So, they will be  
4 selected and there is going to be like training for them?

5 MR. SCHRAUDER: Training, right.  
6 And they will, I will use training as an opportunity to  
7 reduce some of our open apparent causes too, because I will  
8 give them a real Condition Report to do an apparent cause  
9 on as part of their proficiency in that training.

10 The training of the, the CR analyst is not new, but  
11 the additional training they will get will be completed  
12 prior to restart.

13 MS. LIPA: So, all of that  
14 is planned before restart?

15 MR. SCHRAUDER: Yes. And the  
16 manager participation at the CARB when their apparent  
17 causes come, that is ongoing. I would say that that was a  
18 desire prior to the CATI team, now a requirement that the  
19 manager be there. And that is going on and that will  
20 continue.

21 MR. THOMAS: Is that manager or  
22 alternate, or is that a strict rule, manager?

23 MR. SCHRAUDER: Nope, well, the  
24 only time that an alternate can be there for the manager,  
25 is what we call extenuating circumstances. He could be

1 there if the manager was, had delegated his responsibility  
2 to him. The manager can't just send somebody else because  
3 they have something else to do. And I have not had a  
4 problem with manager attendance at those apparent cause  
5 evaluations.

6 And, in fact, we had a discussion today where we had  
7 an apparent cause come to the Corrective Action Review  
8 Board and the manager did not come. It was, in fact, he  
9 was working with Operations in some of the simulator  
10 training, and it was a training Condition Report. The only  
11 reason we allowed it to come to CARB was it had already  
12 been to CARB. CARB had, had accepted it or rejected, I  
13 forget, but we had comments on it. So, what we had to do  
14 was confirm that the comments we had made on the previous  
15 submittal were effectively incorporated. So, I allowed  
16 that alternate to attend for the manager in that case.

17 MR. THOMAS: Okay.

18 MR. GROBE: I just have one  
19 question. The FENOC Manager of Equipment Reliability;  
20 that's a corporate office position?

21 MR. SCHRAUDER: Yes.

22 MR. GROBE: That's, this is  
23 the first time I've heard about that position. That's  
24 interesting.

25 If I understand correctly, you are doing a Restart

1 Readiness Assessment for the next Mode 4 in two parts.  
 2 You're doing the Safety Culture part the next couple of  
 3 days and then you're doing Systems part in a week or two.  
 4 Is that individual, how does this individual get his  
 5 information? How much time does he spend on site, or  
 6 she?

7 MR. MYERS: I don't know  
 8 exactly how much, but quite a bit.

9 MR. GROBE: I was just  
 10 curious. It's a corporate position?

11 MR. MYERS: Right.

12 MR. GROBE: Is that person  
 13 planning on being at your, when the system engineers come  
 14 in, go through each system?

15 MR. MYERS: Yeah.

16 MR. GROBE: Okay. That will  
 17 be interesting, because he can know because he saw.

18 MR. MYERS: That's right.

19 MR. GROBE: Okay, good.

20 MR. BEZILLA: Anything else for  
 21 Bob?

22 MR. MYERS: The trending we're  
 23 doing on apparent causes, Bob?

24 MR. SCHRAUDER: Yes.

25 MR. MYERS: The CARB

1 standpoint, we're really trending, that's fairly new too,  
2 isn't it?

3 MR. SCHRAUDER: I'm sorry?

4 MR. MYERS: The trending to  
5 ensure the improvement in apparent causes increases?

6 MR. SCHRAUDER: Yeah, we track it  
7 on the performance.

8 Jack, you brought up one other thing I did want to  
9 mention. Is that the effectiveness reviews and you hadn't  
10 had an opportunity yet to evaluate those. CARB also is  
11 chartered to review all effectiveness reviews. So, we  
12 haven't seen a lot of them coming in yet either.

13 MR. GROBE: Okay.

14 MS. LIPA: Before we start  
15 the NOP, we're going to take a five minute break this  
16 time. Okay.

17 (Off the record.)

18 MR. RULAND: You did have to  
19 make changes -- you didn't have to add the thermal overload  
20 calc, but you did have to make physical changes?

21 MR. SCHRAUDER: We made a lot of  
22 physical changes at the plant.

23 MR. GROBE: That's a good  
24 plan. It needs to be clarified.

25 MS. LIPA: Let me just add a

1 little bit to it. I think what we were trying to talk  
2 about, things that came out of the inspection. That you  
3 had to make hardware changes.

4 MR. MYERS: Right.

5 MS. LIPA: And earlier, we  
6 talked about calculation margins, there were some in my,  
7 that I remember.

8 MR. RULAND: Not as  
9 representative of the calculations.

10 MR. MYERS: It wouldn't be a  
11 calc. We didn't have them.

12 MR. RULAND: Right, right.

13 MR. GROBE: Okay.

14 MS. LIPA: Okay. Go ahead.

15 MR. BEZILLA: Next slide.

16 My desired outcome for today is to provide you with  
17 our conclusions in regard to the objectives of the 7-day  
18 Reactor Coolant System Integrity Test, commonly referred to  
19 as the Normal Operating Pressure Test, which was completed  
20 in early October.

21 Next slide, please.

22 The NOP Test successfully accomplished the stated  
23 objectives. The objectives were as follows: Conduct  
24 walkdowns of the systems, inspect the Reactor Coolant  
25 System for leakage, validate the new Reactor Coolant System

1 Leakage Program and Procedures and the FLUS Monitoring Leak  
2 Detection System, correct identified problems as is  
3 possible --  
4 (Adjusting slide presentation.)

5 MR. BEZILLA: We wanted to correctly  
6 identify problems as was possible at the time of discovery,  
7 and while in the Normal Operating Pressure Test, obtain the  
8 lowest achievable Reactor Coolant leakage, completion  
9 of Post-Maintenance and Post-Modification Test Packages,  
10 and perform an Operational Readiness Assessment in the  
11 areas of Organization Structure, Management Effectiveness,  
12 and Operations Effectiveness.

13 The NOP Test exercised our plant, our people and our  
14 processes. As we anticipated, a number of areas for  
15 improvement were identified. Most notable were to  
16 deficiencies in Operations effectiveness. These were not  
17 expected. Mike Roder will address this area in a few  
18 minutes.

19 Next slide.

20 In regard to the plant, a number of milestones were  
21 accomplished. We walked down the Plant Systems and  
22 identified problems. It should be noted, and I believe  
23 Christine mentioned this, that your inspectors noted two  
24 weeks, one in a primary system and one in a secondary  
25 system, that were not initially identified by our

1 inspectors.

2 We addressed this by conducting a standdown with our  
3 inspectors, and then reperforming a segment of our  
4 walkdowns, we switched teams and we did the D-ring areas of  
5 Containment.

6 We are confident that our inspectors' abilities to  
7 locate and identify leaks on an ongoing basis. And as Jack  
8 said, we actually did about 1300 inspections. We had two  
9 that we didn't identify initially. And we did a rewalkdown  
10 of those system. I'm pretty confident in our guys'  
11 abilities going forward.

12 We also corrected a number of those items. We  
13 identified deficiencies while we were in the Normal  
14 Operating Pressure Test. We identified approximately 160  
15 items. We took care of about a hundred of those while we  
16 were in the Normal Operating Pressure Test and I believe  
17 we're down to about three items remaining to complete from  
18 that Normal Operating Pressure Test, and those are on the  
19 schedule.

20 We verified the integrity of the Reactor Coolant  
21 System. Our unidentified leakage was very, very low. We  
22 did a number of leak rates, at which were zero. I believe  
23 the highest that we recorded was .008 gallons per minute.  
24 I think we previously had used .006. That was an oops, so  
25 I'll correct that.



1       We confirmed the sensitivity of the Reactor Coolant  
2   System Leakage Monitor in progress, and we confirmed the  
3   sensitivity of the FLUS Online Leak Monitoring System.  
4   And, Craig, if we have time will elaborate on this and a  
5   few other items in a few minutes.

6       And finally, we completed numerous Post-Maintenance  
7   and Modification Tests, Checks, and Inspections.

8       Next slide, please.

9       In regard to our performance, we predominantly  
10   exhibited the characteristic and attitudes which establish  
11   an overriding priority towards nuclear safety activities  
12   and ensured that issues received the attention warranted by  
13   their significance.

14       We were critical of our performance as is evidenced  
15   by the Condition Reports that were generated. Collective  
16   Significance Review conducted for Operations effectiveness  
17   and by the Operational Readiness Assessment Report. We  
18   identified our shortfalls and our areas for improvement.

19       Next slide.

20       In regard to our processes, we concluded that our  
21   processes and procedures support safe and reliable plant  
22   operations when properly implemented. We did identify  
23   areas for improvement in both procedure detail and  
24   implementation.

25       For example, in regard to our integrated operating

1 procedures, the ones we use for heatup and cooldown, we  
2 determined that they had too much flexibility. We have  
3 since benchmarked with the industry and revised them to be  
4 prescriptive. Okay. Flexibility is out.

5 Another example was in the implementation of our  
6 Problem-Solving Decision-Making procedure. We think we did  
7 a pretty good job at identifying situations that should be  
8 addressed with the Problem-Solving and Decision-Making  
9 Procedure; however, our implementation was mixed. We had a  
10 few examples that were textbook real good; we had some  
11 other examples that were not textbook. Okay.

12 We had documented these within the Corrective Action  
13 Process and have taken action to address these performance  
14 shortfalls. As an example, one thing we're going to do is  
15 for the more tenuous problems, we'll assign a manager  
16 sponsor to sort of track along with the team and make sure  
17 we're following the procedure.

18 As we had talked about earlier, that is a fairly new  
19 Nuclear Operating Procedure with FENOC. This was our  
20 opportunity to get into it and use it and we're continuing  
21 to use it as Jim mentioned earlier.

22 One last example was in the implementation of  
23 Immediate Action Maintenance. Scott had spoken of that  
24 earlier. We had one opportunity to utilize the process.  
25 Our conclusion was that the guidance was not very clear nor

1 very user friendly and it was pretty light, as Scott had  
2 mentioned.

3 Immediate Action Maintenance is a process that's  
4 very rarely used. So, it was good, in my opinion, it was  
5 good to identify this area for improvement during the  
6 Normal Operating Pressure Test. We benchmarked the  
7 industry and we have developed new guidance for Immediate  
8 Action Maintenance. This guidance will be implemented on a  
9 FENOC-wide basis, so it will be here, at Perry and Beaver  
10 Valley. This action will be complete within the next two  
11 weeks. We have the procedure drafted. We're in the review  
12 process now. I think we'll have that in two weeks.

13 Next slide, please.

14 In conclusion, I believe the Normal Operating  
15 Pressure Test was a success. All the objectives were met.

16 Any questions? Okay, with that, I'll turn it over  
17 to Mike.

18 MR. RODER: Thank you, Mark.

19 My desired outcome today is to update you on the  
20 ongoing actions we're taking for the Operations Improvement  
21 Action Plan.

22 Next slide, please.

23 Based on some performance shortcomings during the  
24 NOP, we assembled a team of individuals to do a collective  
25 significance; included Operations, Training, our Beaver

1 Valley Unit One Superintendent, and two industry  
 2 performance experts.  
 3 The team did a critical assessment of several areas  
 4 looking at Condition Reports, observations and  
 5 performance -- training performance records. Came up with  
 6 five areas for improvement. Those being the Operations  
 7 Oversight and Leadership Improvements, transitioning from a  
 8 Maintenance focus organization to a strong Operation focus  
 9 operation; implementation of our standards and expectations  
 10 within Operations; strengthening knowledge and skills in  
 11 certain areas; and improving our Condition Report  
 12 Inspections and the timeliness of those.

13 Next slide, please.

14 We took that Collective Significance Report along  
 15 with some industry reviews, some of our actions out of the  
 16 Operational Readiness Assessment Report and some NQA,  
 17 Nuclear Quality Assurance Assessments that we received.  
 18 Put that altogether in one plan and developed the  
 19 Operations Improvement Action Plan.

20 The plan is designed around four key barriers to  
 21 prevent events. Individual, Program, Management and  
 22 Oversight Barriers. What I'll do is I'll go through what  
 23 actions we're taking under each of those barriers.

24 Next slide.

25 Under the individual barrier, we took our crew men

1 and assessed strengths, weaknesses, performance,  
2 personalities, put together the four strongest crews out of  
3 those management. We also conducted lessons on oral  
4 performance to assess understanding expectations. This is  
5 yielded a couple different things. Some of the short term  
6 issues we're dealing with in training right now, correcting  
7 those in coaching and training. We believe there will be  
8 longer term issues, which we'll resolve through individual  
9 and crew development plans.

10 We've reviewed our expectations for improvements.  
11 Did this about a year ago. Did it again now. We found a  
12 couple areas to be improved, but overall feel they're very  
13 good. Currently, we're conducting about one hundred hours,  
14 a little over one hundred hours of training with our  
15 licensed operators to address the knowledge and skills.

16 Next slide.

17 MR. THOMAS: Mike, let me ask  
18 you a question regarding standards and expectations. Do  
19 you believe the operators understood the standards and  
20 expectations that were required and just failed to  
21 implement them or?

22 MR. RODER: I was going to get  
23 that.

24 MR. THOMAS: I'll hold off.

25 MR. RODER: That's all right,

1 I'll answer it now.

2 We assessed the Operations standards and  
3 expectations didn't do very good. Through the oral board,  
4 we're finding that there is some lack of knowledge in some  
5 of the specifics; and in practice, there was some lack of  
6 execution and also we need some reinforcement in that  
7 area. So, it was a good standards expectations, lack of  
8 implementation was the issue.

9 MR. THOMAS: So, how will that  
10 reinforcement be accomplished?

11 MR. RODER: That's the rest of  
12 my presentation. Let me go through the rest. Just ask  
13 that question, I'll answer it again. Okay?

14 MR. HOPKINS: Let me ask a quick  
15 question. The last bullet about targeting and training on  
16 integrated operations procedures. Could you give me some  
17 examples of what you term as integrated operations  
18 procedures?

19 MR. RODER: Heatup, startup,  
20 power operations, those type of procedures.

21 MR. HOPKINS: Okay, thank you.

22 MR. RODER: Under the program  
23 barrier, the procedure we just talked about, integrated  
24 operating procedures, we found, as Mark had mentioned,  
25 there was too much flexibility in those procedures. We

1 went out and benchmarked the industry, took the best  
2 practices out of the industry leader procedures. Then we  
3 took some time and scripted the entire evolution of heatup,  
4 power ops, startup, those type of procedures.

5 That became very prescriptive activities or tasks,  
6 if you will. Those tasks, then we aligned the procedure  
7 performance task, we aligned our prejob brief around those  
8 tasks, and aligned our training around those same tasks.

9 We also developed the entire prejob briefs for the  
10 heatup power operations, one hundred percent power. We're  
11 using those prejob briefs and the procedures that we've  
12 changed in the training right now this very week and next  
13 week.

14 Procedure addressed and evaluated by two different  
15 crews. Myself and my superintendent are focusing on  
16 consistent performance of those procedures from crew to  
17 crew.

18 In addition to the Integrated Operating Procedure,  
19 we've also reviewed the System Operating Procedures that  
20 they go out and implement; and Surveillance Test  
21 Procedures, key surveillance test procedures and key  
22 administrative procedures. Pretty comprehensive review of  
23 our procedures.

24 We've changed our prejob brief expectations to  
25 enhance prejob briefs, most notably by including reverse

1 briefs. Part of our training is to train those reverse

2 briefs to ensure proper performance.

3       The last bullet there is, we've used the systematic

4 approach to training to address the knowledge and skills

5 issues in the areas that were recommended by the Collective

6 Significance Group.

7       Under the management barrier, we continue to

8 reenforce adherence to on-shift roles for both the

9 superintendent, shift manager, shift engineering and rest

10 of the crews. That becomes very important for role clarity

11 to understand who is providing direction to reactor

12 operators, who is providing oversight. We saw some

13 weaknesses in that area.

14       We reduced operator work hours to address any

15 fatigue issues, and we're also training site managers to

16 achieve more critical observations. This is another item

17 that came out the Operational Readiness Assessment Report.

18       The last barrier, the Oversight Barrier; we moved

19 the shift managers back to the control room to provide

20 additional oversight of control room activity. Previously,

21 for most of the outage, they've been working out of the

22 Work Support Center, where, which is where most of the

23 action is, most of the decisions are made.

24       We're also sending Operational Oversight Managers to

25 each one of the shifts. These individuals are proven



1 performers selected from industry high performance  
2 stations. They'll rotate the crews, both in the station  
3 and the training, and provide feedback to the shift manager  
4 and senior management. During plant evolutions these  
5 Operations Oversight Managers will specifically look at  
6 upcoming activities and our readiness for those activities  
7 and report back to senior management. They'll remain in  
8 place for approximately four weeks, four weeks beyond  
9 hundred percent power.

10 MR. GROBE: I'm sorry, four  
11 weeks what?

12 MR. RODER: Beyond one hundred  
13 percent power.

14 MR. GROBE: Thank you.

15 MR. RODER: Next slide,  
16 please.

17 Effectiveness of this plan will be measured in  
18 several different ways. First of all, successful  
19 requalification of the licensed operators, and nonlicensed  
20 operators.

21 Consistent demonstration of proficiency with plant  
22 startup, heatup, power ops, abnormal procedures on a  
23 simulator will be monitored.

24 The operational oversight managers, I told you, will  
25 have a Qualitative Assessment Report. We'll use that to,

1 to gauge effectiveness. And, also, we would expect no  
2 conditions adverse to quality during the heatup caused by  
3 human error or process weaknesses.

4 Next slide, please.

5 In conclusion, my strong belief that Operations will  
6 be ready for restart in the completion of this Operations  
7 Improvement Plan.

8 MR. THOMAS: I've got two  
9 questions. The first, I'm still unclear on how  
10 expectations and standards are going to be demonstrated and  
11 enforced-- enforced isn't the right word, but demonstrated  
12 to both your qualified and nonqualified, or licensed and  
13 nonlicensed operators, so they understand what management  
14 expectation is for them.

15 MR. RODER: Couple different  
16 ways. The oral board that I spoke of, we asked a series of  
17 questions all around standards and expectations. And based  
18 on answers, we were able to provide on-the-spot coaching of  
19 any deficiencies.

20 Also, during the simulator times, we're able to  
21 critique those simulator evaluations and also provide  
22 coaching at that point.

23 At each, I have an hour of time, each cycle. We  
24 have Alpha cycle, Bravo cycle and Charlie cycle of training  
25 prior to restart. Each one of those cycles, I have an hour

1 to have a discussion about the specific expectations that  
2 are not being met, what I see are the, the most prevalent,  
3 if you will.

4 MR. BEZILLA: Scott, let me add  
5 in there. So, we're talking to these guys during oral  
6 boards and we're asking them and calibrating as needed.  
7 We're driving in the training for them, and Mike said we  
8 have about 106 hours of training for each of the crews, and  
9 then our Operational Oversight Managers, who we've got from  
10 say, I'll say, high performing plants, they're going to be  
11 training side by side with our operators. They'll make  
12 our, my job to make sure they understand the expectations,  
13 our expectations, and then their job on shift with these  
14 guys is to be monitors on adherence and we're following  
15 those expectations; and if not, go tell the shift manager,  
16 hey, you're not meeting expectations and they'll report out  
17 to senior management on what they see on a daily basis and  
18 then weekly report out to us.

19 So, we have the Operational Oversight Managers in  
20 place to monitor our performance to our standards and  
21 expectations, and that will be 24 by 7.

22 MR. MYERS: We're doing  
23 Readiness Reviews and Effectiveness Reviews.

24 MR. THOMAS: Are there any  
25 mentoring? When I say mentoring, benchmarking would be a

1 better word, plan for your shift managers, unit  
2 supervisors, at other facilities or is that, you know, that  
3 you feel that demonstrates this type of high quality  
4 performance?

5 MR. RODER: A week ago Monday,  
6 I sat with the other Operation Managers within FENOC, we  
7 did lay out a Benchmarking Plan for 2004. Part of that  
8 included getting our shift managers to not only be shift  
9 managers imposed for us, but also to other high performing  
10 plants, to see good standards and expectations.

11 MR. THOMAS: Okay. The other  
12 question that, I know that was a series of questions, but  
13 the other topic --

14 MR. GROBE: Another thing,  
15 one way to benchmark is bring the plant to you. We brought  
16 in, we hand selected the people we brought in. They are  
17 executives of that company, hand selected from Beaver for  
18 us. We gave them specific criteria what we were looking  
19 for.

20 MR. THOMAS: Right. One of  
21 your bullets also said you reduced Operations work hours,  
22 but then again you also said you were on four shift  
23 rotation. I was just wondering how long do you plan on  
24 being on four shift rotation and how does that impact  
25 operator time off, training, or does it?

1           MR. RODER:           Currently, we have  
2 five shifts, four of which are on shift, one is off shift  
3 and assignments. So, long term, we need to address that.  
4 Short term, we're going to stay on four shifts through the  
5 restart and through the first month or so of power  
6 operations, but that's currently a 60-hour work week.

7           MR. THOMAS:        So, there is not  
8 long term plans to stay on four shift rotation?

9           MR. MYERS:         No.

10          MR. RODER:         No.

11          MR. BEZILLA:       Through the start  
12 up, Scott, we'll be on the four shift rotation; two nights,  
13 two days, three days overlap, but then we'll get off of  
14 that once we get the plant recovered.

15          MR. THOMAS:        Okay.

16          MR. MYERS:         Okay?

17          MR. GROBE:         I had a couple of  
18 questions. Mike, when is all of this going to be done?

19          MR. RODER:         Right now we're on  
20 track for December 4th to be done with requalification and  
21 the operations plan.

22          MR. GROBE:         Okay.

23          MR. MYERS:         Jack, that's not,  
24 not working weekends on this at all. So, we could ask for  
25 that.

1 MR. GROBE: Okay.

2 I'm still not clear on the root cause. I see areas  
3 for improvement, but if I recall, your operators were  
4 involved in the development of your expectations. I think  
5 if I go look at every one of them, I can find it in the  
6 topic.

7 MR. RODER: That's correct.

8 MR. GROBE: It's been that way  
9 for months. And if you follow that expectations, your  
10 third area for improvement is implementation of standards  
11 and expectations. If you follow that, you can't do  
12 anything other than have a solid Operations oversight and  
13 leadership and effective transition from operational focus,  
14 because that's what those standards and expectations  
15 define.

16 So, if they were trained on them, and in fact, they  
17 were involved in developing them, they were trained on  
18 them, every one of them has in his pockets, then it must be  
19 something else that caused them not to follow. Either they  
20 didn't take your desire to have them follow those  
21 expectations seriously, or there was some other kind of  
22 pressure that caused them to not follow them; or -- it's  
23 not clear to me what the root cause is. This was  
24 unexpected. And, until I understand root cause, I can't  
25 understand how your corrective actions, and this looks like

1 a good corrective action plan, but I can't understand how  
2 it's going to be effective.

3 So, could you just take a few minutes and explain to  
4 me exactly why your operators didn't follow your  
5 expectations? Help me understand that.

6 MR. RODER: I think there were  
7 several reasons that contribute to that. It was part of  
8 collective significance, that's why we wanted to put that  
9 together to understand a broader picture, a bigger  
10 picture. That collective significance came up with those  
11 five specific areas. As I discussed, it's kind of a, there  
12 is no root cause, we did not do a root cause on the overall  
13 performance.

14 MR. GROBE: Okay.

15 MR. RODER: I also believe  
16 that there is many factors for that. I believe they're all  
17 addressed within that Operations Improvement Action Plan.  
18 Part of it is coaching and reinforcement of expectations.  
19 That's in the leadership. Part of it is in the knowledge  
20 of those expectations. We're finding that through the oral  
21 boards, there are some deficiencies there. We're taking  
22 care of those.

23 MR. BEZILLA: Jack, we did  
24 Collective Significance Review. What we saw, you have a  
25 challenge and you end up with an event. There is a number

1 of barriers that you go through. When we did a collective  
2 significance, it showed we had improvement opportunities in  
3 individual barriers, procedure barriers, maintenance  
4 barriers, and oversight barriers.

5 We took a whole list and said, hey, this is not what  
6 was expected. This is not what we had been seeing prior  
7 to, okay. And when we had that operator deficiencies, had  
8 those operators performance, we stood back and said, all  
9 right, we're going to just go meet with the operators, but  
10 that's not the right thing to do.

11 When we took the whole list, we said, hey, first  
12 off, procedure guidance was too flexible. And I believe  
13 the operators thought they were adhering to the procedures  
14 and doing their best to adhering to the procedures. When  
15 we looked, we said, hey, that's not, that's not, the  
16 procedures aren't where we want them. So, we made those  
17 prescriptive.

18 On an individual barrier, we thought we had prepped  
19 them up, trained them on the heatup activities, which we  
20 heated up to 250 pounds, but that was it, right over the  
21 last 21 months. So, they hadn't been in that series of  
22 activities. Thought we had done an adequate job of  
23 preparing. In hindsight, had not.

24 So, now, we're taking time to put them through over  
25 a hundred hours of training on those activities, which they



1 had not been conducting over the last 21 months. And from  
2 a management standpoint, we had some of the players in  
3 different roles than what they would normally be in if we  
4 were operating.

5 As an example, we had two right hands of Mike, the  
6 superintendents, as Shift Outage Ops Managers. That they  
7 weren't in their normal leadership role, the Ops  
8 Superintendent for the shift in the role. Ops  
9 Superintendent Staff taking care of the procedures and  
10 other things.

11 So, you know, we changed that immediately after this  
12 and got those individuals into their roles to provide the  
13 leadership and implement oversight standpoint. There is a  
14 couple pieces of that; one is the shift manager oversight,  
15 the shift engineer oversight, the Ops superintendent, Ops  
16 manager oversight. We're focusing on that in the training  
17 we're providing them.

18 And then, from a company standpoint, our quality  
19 oversight, our system over there, and said, hey, our  
20 quality inspectors that look at Operations are essentially  
21 training, they were trained by the same guys, same  
22 expectations. We said, hey, we need to get some external  
23 SRO types in here to help our quality guys see things that  
24 they may not have been able to see just because they came  
25 up through the same chain.

1       So, that's the other piece that we're working on.  
2       So, we think holistically with the plan we have in place,  
3       we're going to improve all four of those barriers and that  
4       will provide us the assurance that our operators will be  
5       ready to restart.

6               MR. MYERS:       Let me add one  
7       thing. We train, we went and watched who was training.  
8       And, when we looked at the cooldown, our cooldown did not  
9       represent exactly the way we trained, you know. And the  
10      procedure left that quite a bit.

11      Shift manager or people taking the action, they  
12      thought they were taking conservative action. They did  
13      little things wrong. That's not the way we trained. And  
14      that did effect our set point down. So, but that's not the  
15      way we trained, you know.

16      You know, you got to do it 40 times 40 times 40,  
17      which means you've got to watch and make sure you do this.  
18      It's not real hard to cooldown. We could heat it back up.  
19      You know, we could pressurize it back up. Then we made our  
20      graphs up. Be sure to have a strict prescriptive. We cool  
21      back down, and we cooled back down flawlessly, you know,  
22      flawlessly. Once we got that prescriptive adherence in  
23      place. We didn't know why it wasn't there, so we learned  
24      that.

25      With these observers are going to do for us, they're

1 going to make sure, first of all, we're making sure that we  
2 prescribed out this heatup and cooldown. Our observers  
3 are going to make sure we haven't missed anything and we  
4 implement just like we trained. And if we do that, we'll  
5 be fine.

6 MR. THOMAS: Given what you  
7 have, on what level should those two events been prevented?

8 MR. RODER: Which barrier?

9 MR. THOMAS: Between Bravo and  
10 reactor trip.

11 MR. RODER: Are you asking  
12 what barriers?

13 MR. THOMAS: No, I'm asking,  
14 you said, you know, you went through a whole litany of  
15 procedures, oversight, operators; you listed a whole slew  
16 of things that contributed to the events. You know, I'm  
17 asking you, Mike or Mark, on what level should those have  
18 been caught and prevented?

19 MR. RODER: Any of those  
20 barriers should have prevented it from occurring. The  
21 final barrier is an individual, and that shift manager  
22 should have stopped it. But any of those barriers are  
23 capable, if properly built to stop any of those events.

24 MR. GROBE: There is no doubt  
25 that the procedures had some challenges. And, for example,

1 in the cooldown with the training in the simulator and  
2 cooldown, there was normal decay heat instead of lesser  
3 decay heat, as you're in right now.

4 But at some point, you know, for example, there was  
5 some fundamental watchstanding problems. And at some  
6 point, rest assured, I'm not trying to beat up the  
7 operators, but at some point the operators chose not to  
8 implement your expectations, because the expectations were  
9 clear. I could go up and pull it out of the pocket and I  
10 could read it. And you didn't identify that in your  
11 simulator evaluations.

12 MR. MYERS: You wouldn't.

13 MR. GROBE: Well, and they  
14 could have chosen not to follow your expectations in the  
15 simulator too --

16 MR. MYERS: Yeah.

17 MR. GROBE: -- as far as  
18 prejob briefs and things like that. It seems like they  
19 were performing differently in the simulator and in the  
20 control room.

21 MR. MYERS: Absolutely.

22 MR. GROBE: Tell me a little  
23 bit about how you're going to get feedback from your  
24 oversight managers, because it seems like that's going to  
25 be a very important part of your evaluation process. How

1 do you get feedback from those people?

2 MR. BEZILLA: Jack, we brought  
3 these guys in. We've shared with them the Collective  
4 Significance Report, the Operations Improvement Action  
5 Plan. We have developed a charter for them specifically.  
6 My intent is to have them use our Observation Database,  
7 which is an electronic tool we have available to them, so  
8 each shift, they'll be able to give us an electronic  
9 database. They will also have our phone numbers, if there  
10 is anything like that that is on the spot where they feel  
11 they have the urge and need to call. They can call Mike or  
12 myself, okay, or Barry, when he gets in place.

13 But we're going to use electronic database for their  
14 observations on daily and weekly basis. And then in the  
15 middle of the night, if they see something not right,  
16 they're just going to call us; we'll be there.

17 MR. GROBE: Have you  
18 established any sort of an evaluation or criteria for  
19 restart, demonstration that your operators have performed  
20 effectively, and you have some kind of a criteria that  
21 you're measuring against that will include probably  
22 Loehlein's QA assessments and your Oversight Managers'  
23 assessments? What is that criteria?

24 MR. RODER: The most specific  
25 is the annual requalification, which includes demonstrated

1 knowledge, skills, abilities, and proficiencies. That is  
2 the most specific criteria.

3 MR. GROBE: I understand  
4 that's a very specific criteria, but I'm not sure it  
5 addresses this issue. It certainly ensures, required by  
6 us, it certainly ensures a minimum baseline knowledge of  
7 skills and abilities, but most of this was, I don't think,  
8 was a knowledge, skill or ability issue, or those operators  
9 wouldn't be around anymore. It was more an implementation  
10 question.

11 MR. BEZILLA: Jack, we'll do  
12 that. We'll do the Operations Improvement Plan, which as  
13 Mike said at the end of that, we'll have requalified and  
14 trained operators. We'll do the Restart Readiness for Mode  
15 4. We'll get the shift manager as part of that to say I  
16 and my crew are ready, as well as the plant.

17 We'll have the opportunity to heat back up and prior  
18 to Mode 2, we'll do another Restart Readiness Assessment,  
19 which will include input from our Quality Oversight  
20 Organization, as well as our oversight managers that we'll  
21 have on shift. And we'll also have the Institute of  
22 Nuclear Power Operations in here providing us feedback.  
23 They were just here the last couple of weeks looking at  
24 us.

25 MR. GROBE: Will INPO be here

1 when you're heating up going through Mode 4 and 3?

2 MR. BEZILLA: I don't believe

3 so. They're going to be here from December 1 through 4.

4 They may have a representative or two here, but that's not  
5 been solidified at this point.

6 MR. MYERS: But to answer that

7 question, Restart Readiness Review. We won't heat up until  
8 we bring these advisors in and look at the training and  
9 convince ourselves that we're ready to heat up.

10 MR. GROBE: Right. I

11 understand that, Lew.

12 I'm struggling with my need to get your restart  
13 report, because I need it so I can understand it and make  
14 sure we understand your thinking, what your basis, what you  
15 think your basis is for the question of restart, as  
16 contrasted with the fact that you're not going to have some  
17 of this information until sounds like later in the game,  
18 certainly well after submission of the Restart Report.

19 I'm wondering how we can get this information on the  
20 observations and feedback and what access will we have?

21 MR. MYERS: Well, you know,

22 when we come to -- let me answer that. I'll make sure that  
23 we give you our Assessment for Readiness Plan. Okay? And  
24 then I'm not sure how we'll do that, we'll be talking to  
25 you for the heatup, for the startup, you know.

1       One of the things that we have, we have a detailed  
2   plan laid out now of plateaus and readiness reviews and  
3   effectiveness reviews, so let us share that with you and  
4   see if that meets your needs.

5           MR. GROBE:        Okay, other  
6   questions? Okay, very good. Thank you.

7           MR. MYERS:        Let me ask you, I  
8   know it's getting late. Is this a section that you would  
9   like to not include and go to the milestone?

10          MR. BEZILLA:       This section  
11   essentially says the bottom looked good, the top looked  
12   good on the reactor vessel.

13          MR. GROBE:        I think we've  
14   heard most of this previously, and certainly we had  
15   inspectors here watching.

16          MR. MYERS:        Right.

17          MR. GROBE:        It's in the  
18   slides. Are your slides out on the table out front?

19          MR. MYERS:        Yes.

20          MR. GROBE:        Folks in the  
21   audience have them. Great.

22          MR. MYERS:        So, we'll move on  
23   to Clark Price.

24        Before we get started here, make a comment or two.

25          MR. GROBE:        Can I make an



1 observation? We are getting a lot of competition, so you  
2 might want to move the microphone a little closer.

3 MR. MYERS: Before Clark gets  
4 started. He's a long term employee, Ottawa County  
5 resident. And we have a guest in the audience. Clark's  
6 mother is in the audience today.

7 And, do you want to introduce yourself, stand up a  
8 minute, raise your hand.

9 And Clark's mother says we need to get this done,  
10 because she has a lot of things for Clark to get done, that  
11 Clark needs to get done at her house.

12 With that, I'll turn it over to Clark.

13 MR. PRICE: Thanks, Lew.  
14 Hopefully, this next section will answer a few questions  
15 that we've been discussing here as far as our plans for the  
16 remaining milestones to restart.

17 One of the things that we've been doing on site is  
18 developing communication tools for employees to help align  
19 the organization and employees to understand what is  
20 required over the next few weeks to get to restart, and  
21 also beyond restart.

22 One of the tools that we're using is one, on the  
23 audience's right, the large long map that shows there the  
24 restart actions that are required between now and, and  
25 restart approval by the NRC.

1       What I'm going to talk about today is something  
2   that's out of our, our station key events, which is another  
3   document we've been using on site, and we've been providing  
4   to each of the employees, as a matter of fact, on Tuesday  
5   morning, yesterday morning, every employee was greeted at  
6   the door with a copy of this report along with the new  
7   FENOC Safety Culture Revision Document.

8       So, what I'll go through is this. I'm going to  
9   focus primarily on events that are specific for restart  
10   here. However, the station key events does have start  
11   actions in it, activity items as well as items that are  
12   going to be post restart, as we also incorporate the  
13   Operations Improvement Plan for Cycle 14, as Lew discussed  
14   several times today.

15       So, let me get on to the station key events, what  
16   we'll talk about today. Coming up tomorrow and Friday, we  
17   have a full day each day of our Mode 4 and 3 Restart  
18   Readiness Review Meetings. This is where we use our  
19   business practice we developed and we go through a Safety  
20   Culture Assessment. It will be another review of our  
21   Safety Culture, a readiness along with Safety Culture  
22   Assessments, surveys that have been done.

23       This will bring together with those surveys with the  
24   Quality Assurance Survey that was done, and surveys that  
25   were done out of the Adventure sessions and bring those

1 forward on the next public meeting on December 3rd and show  
2 you the results of those, of those assessments.

3 November 18th, not two weeks from now, but actually  
4 next week Tuesday, again, another phase of our Restart  
5 Readiness Review Meetings for Mode 4 and 3, which will be  
6 our Systems Readiness for Restart. And our Plant  
7 Engineering Manager and Mike Roder, our Ops Manager, have  
8 selected the systems, around 20 systems that will be  
9 discussed that day for plant engineers.

10 They come into this meeting. It's a meeting of all  
11 managers, directors, vice-presidents, and Lew, and others,  
12 and present their systems for restart.

13 On November 20th, we have a Company Nuclear Review  
14 Board, where we'll be, on the 20th, they will be part of  
15 their agenda; I provided a copy of that to Christine  
16 yesterday, will be assessed, or excuse me, on Monday, will  
17 be an assessment of our Restart Readiness.

18 One of our activities that was required in our  
19 restart approval process, their concurrence for restart.  
20 So, there will be discussions at the meeting next Thursday  
21 with the Company Nuclear Review Board concerning that.

22 On November 24th, that's a very key date. This is  
23 a very key document. This is where we're going to submit  
24 on the 24th, our Integrated Restart Report to the NRC,  
25 which will be our initial request for approval for

1 restart. This will be somewhat conditional, as we talked  
2 about. There are going to be some items that will still be  
3 remaining open. They will be identified in that report,  
4 and things like the high pressure injection pump  
5 modification, breaker coordination that we talked about,  
6 Operation Improvement Plan, initiatives will still be open  
7 items that will be identified in that report and we'll  
8 follow-up on those in subsequent meeting that we'll have  
9 for restart.

10 This document is a document required by the  
11 Confirmatory Action Letter. Another important piece of  
12 that document will be the Operational Improvement Plan for  
13 Cycle 14, that we've also discussed today, where we will  
14 carry forward a number of things that we have been working  
15 on during restart and we'll carry those forward and into  
16 Cycle 14 as improvement initiatives for the next two years.  
17 So, that's another significant document for us that will  
18 accompany that.

19 We've had a number of questions that you've posed  
20 today concerning the content of that document and we'll  
21 take those into consideration as far as what we currently  
22 have in, and what we need else to do.

23 On December 1st, we're going to transition to our  
24 Online Work Control Schedule. For the last 20 months,  
25 we've been working underneath an outage process, Outage

1 Work Control Process. And, on the 1st of December, we  
2 intend to transition and fully institute the FENOC Work  
3 Management Process and Procedures for online work control.

4 So, that's a very significant transition for us  
5 moving from an outage mode into an operating mode, and this  
6 is kind of one of the items that Mike referred to in there,  
7 is that transition from an outage to an operating  
8 organization.

9 On December 1st through 5th, we discussed, INPO will  
10 be in here with an industry review team. They will be  
11 assessing our restart readiness that we were in, in early  
12 October. Give us a number of observations,  
13 recommendations, and be coming back in to assess our  
14 effectiveness and what we've done to address those.

15 On the 1st and the 4th, we have our, another set of  
16 Mode 4 and 3 Restart Readiness Review Meetings. We'll do  
17 an organizational readiness again, this is part of our  
18 Restart Readiness Review Practice. This is where the  
19 station managers come in and affirm that each of their  
20 sections is ready for restart.

21 Again, that's a pretty significant meeting. There  
22 is a complete checklist of items that have to be gone  
23 through for each manager to make that affirmation.

24 Now, here's part of what we just talked about. In  
25 addition some of the enhanced scope, included in these

1 Restart Readiness Meetings will be Operations' Improvement  
2 Action Plan. We will address the plan, the effectiveness  
3 of that plan, we will get feedback directly from the  
4 on-shift oversight people that are coming in as part of  
5 assessing the performance of Operations.

6 Now, this meeting right here will be primarily  
7 looking at their, the Operations' performance up through  
8 the period where they are completing the action plan action  
9 items.

10 The restart, then we have the Restart Overview Panel  
11 action items, during our meeting this last Monday, which as  
12 Jack referred to earlier was kind of a marathon meeting.  
13 We had a number of actions that they would like us to take  
14 and present to them at our next meeting, which is going to  
15 be now December 5th. That was originally on our schedule  
16 for December 1st, or 2nd, I believe it was. That meeting  
17 will now be the 5th, and we will present our actions, what  
18 we've done to address the items that they've provided us.  
19 And, I believe Lew went over those earlier in the meeting.

20 On December 3rd, we have another public meeting,  
21 right, I believe it will be here.

22 MS. LIPA: That's right.

23 MR. PRICE: That meeting will  
24 again include the results of our Safety Culture  
25 Assessments, our Safety Conscious Work Environment Surveys,

1 the Safety Culture Assessments that we'll be doing as part  
2 of our restart tomorrow and Friday; and, among some other  
3 actions that we received today for discussion in the next  
4 meeting.

5 Then on December 5th, this is the Restart Overview  
6 Panel. This is our, intended to be the final Restart  
7 Overview Panel for, prior to us seeking approval for  
8 restart. And, again, this meeting will be focused on open  
9 actions that, that we're still working on up until this  
10 point. At this point, all the plant restart work should be  
11 complete, and we should be addressing the remaining actions  
12 that they gave us at Monday's meeting.

13 On December 8th, pretty important date for us, right  
14 now that's the date for, on that Monday, the Restart, NRC  
15 Restart Assessment Team Inspection will start. And I  
16 believe that's led by Dave Passehl, I believe, right?

17 MR. PASSEHL: It will be led by  
18 a different person than me, Rick Stakowski.

19 MR. GROBE: Let me talk a  
20 little about that. That's tentative date, but we have that  
21 inspection staffed with inspectors from three of the four  
22 Regions across the country. It's going to be lead by Rick  
23 Stakowski, who is the Senior Resident of Byron Station,  
24 Illinois. And there is folks from quite a few other  
25 stations that will be coming here.

1        So, if you're ready to transition to Mode 4 and 3 at  
2        that time, then the inspection will occur then. If it's  
3        later, it will occur later.

4                MR. PRICE:        Right.

5                MR. MYERS:        What if it's  
6        earlier?

7                MR. GROBE:        Pardon me?

8                MR. MYERS:        What ~~it's~~ if it's  
9        earlier?

10               MR. GROBE:        If it's earlier,  
11       it will be earlier.

12               MR. PRICE:        Based on our  
13       schedule, we're ready to progress that week, so we're  
14       planning on that inspection this week. And we'll get the  
15       team in there and then we'll start heatup activities and  
16       move to Mode 4 somewhere around the 9th, which is on  
17       Tuesday, then Mode 3 on the 10th, and achieve full Reactor  
18       Coolant System temperature and pressure somewhere around  
19       the 11th of December.

20       Also, on the 11th and 12th of December, we have some  
21       more Readiness Review Meetings. This is now for Mode 2,  
22       which is what we're referring to as Restart. Again, we'll  
23       have organizational readiness meetings, again the managers  
24       will now come in and affirm the readiness to actually go to  
25       full power operation at this meeting.



1 Again, similar meeting, we're going to have the  
2 Operations Improvement Action Plan Effectiveness. We'll be  
3 actually talking about actual Operations performance  
4 through the mode ascension, again with the oversight,  
5 on-shift oversight team reporting on these meetings.

6 We'll also be, in these meetings will be some things  
7 that we talked about. There will be some of the major  
8 programs that we're going to do an assessment on, like our  
9 On-Line Work Control Process that we have just implemented,  
10 Procedure, Use and Adherence, and ensure that the training  
11 that we've done is showing its effectiveness, the  
12 Corrective Action Program effectiveness that Bob Schrauder  
13 discussed, and then our final Plant Systems Readiness,  
14 we'll also go through any issues with any systems, any mode  
15 restraints that are there for Mode 2 and Mode 1 at that  
16 meeting, make sure that they are ready to be closed out.

17 Then on following page, next slide, please.

18 Sometime shortly after that, we will be having a  
19 public meeting for our Request to Restart. And, then  
20 following that, we will be entering, following restart, we  
21 will enter Mode 2, then we'll move on to enter Mode 1.

22 Then we actually, we've now put in, we're also  
23 working on Power Ascension Plan, but we're putting in a  
24 hold point for another effectiveness review before we go to  
25 a hundred percent power, somewhere around 65 percent. At

1 that point, we'll get both main feed pumps in operation,  
2 and do an assessment of our plant and people and determine  
3 whether we're ready to go to full power, full one hundred  
4 percent power.

5 And, following that, in two weeks following  
6 achieving hundred percent power, we will do a Post-Restart  
7 Integrated Test Plan Critique.

8 I guess one of the things I would like to point out  
9 here, is that over the next roughly, well, next month,  
10 about 50 percent of our management time on the site is  
11 going to be dedicated to Readiness and Effectiveness  
12 Reviews. We've got an extensive amount of time here  
13 wrapped up in meetings, and we'll be doing those  
14 assessments, and we need to do that to make sure that we  
15 have taken every action necessary to ensure that our plant,  
16 our people, and our processes are ready, so when we do come  
17 to the meeting for restart approval, that we're confident  
18 that we are ready to go to full power operations.

19 Any questions?

20 MR. GROBE: Questions? I  
21 just have one observation.

22 We have a requirement, which I'm surely going to  
23 meet, to post meetings ten days ahead of time. And, that's  
24 somewhat challenging, because what that would mean is we  
25 may have to post the restart meeting before we have the

1 information from your operational performance. I want to  
2 make it clear that posting it doesn't mean it's actually  
3 going to happen.

4 If there is any semblance of operational performance  
5 similar to what happened during the NOP test, that meeting  
6 may have to be delayed. So, it's, it's just one of those  
7 realities of life. I certainly want to give folks enough  
8 time to plan their schedules so that they can be here if  
9 they want to be here, because that's the whole purpose of  
10 our public meeting posting requirements is to give people  
11 enough time to plan. So, just be aware of that.

12 MR. MYERS: If we have  
13 operational performance problems on heatup, we'll cool back  
14 down.

15 MR. GROBE: I understand. I  
16 did have one question. The November 20 Company Nuclear  
17 Review Board, is that going to be dedicated only to Restart  
18 Assessment?

19 MR. PRICE: No, that's a  
20 regular company review board meeting, but it does have this  
21 on the agenda.

22 MR. GROBE: Will that be the  
23 first one where they're going to do apparent cause  
24 assessments?

25 MR. SCHRAUDER: Say again?

1 MR. GROBE: Will that be the  
2 first meeting they're going to be doing apparent cause  
3 reviews?

4 MR. SCHRAUDER: Yes.

5 MR. GROBE: Good.

6 MS. LIPA: Anybody else have  
7 any questions so far?

8 MR. MYERS: Thank you. You  
9 know, I'm very excited to be where I am now. The plant has  
10 changed, and it changes rapidly from a, ~~an instruction~~ construction  
11 focus, if you will, to an operational effectiveness focus.

12 The remaining items we have on the RRP agenda is 14  
13 items. Only 8 of those 14 items have nothing to do with  
14 instruction. They have to do with operational readiness  
15 and our ability to continue to improve performance after  
16 restart.

17 Let's go look, that's what they're about. So, if  
18 you go look at what we have on our plate now; the critical  
19 path is no longer hardware. It's getting ready for the  
20 online schedule; it's the Operational Support Center,  
21 transition from a Construction Center to an Operational  
22 Support Center; the Operational Improvement Plan, the  
23 Operations Readiness and Effectiveness Reviews were done;  
24 the System Health Reviews that were done, the Corrective  
25 Action Performance Improvements that were implemented, and

1 then the station transition at the morning meeting from a  
2 6:30 Construction Meeting to a Management and Teamwork  
3 Meeting, like we have at our normal operating plants.

4 Transition of the plant out of this long term, long  
5 term shutdown to an operational effective plant, we're  
6 working hard at. We think we continue to make  
7 improvements, and are getting through with our plans. And  
8 we hope today demonstrated that for you.

9 Thank you.

10 MR. GROBE: Okay. Any  
11 comments from anybody?

12 I just have -- by the way, the timing is perfect; it  
13 sounds like it stopped raining. Just one or two  
14 observations.

15 I certainly don't want to be perceived as picking on  
16 the operators, but the operators drive the bus and  
17 everybody else is on the bus, and it's absolutely critical  
18 that they understand that there is no choice but error-free  
19 operation. If it takes an hour to do five steps in a  
20 procedure or a day or a week, it takes whatever it takes to  
21 get it done right. If they need ten people in, they need  
22 to get those ten people in. If it takes extra time to  
23 monitor parameters correctly, then it takes extra time.

24 I'm not inferring that there was any schedule  
25 pressure, I haven't seen that. But for whatever reason,

1 the operators did not implement your expectations. And,  
2 you know that just can't be the case in the future.

3 So, we're looking forward to evaluating the  
4 effectiveness of all the plans. Many of these activities,  
5 this is the first time we have had a detailed dialogue on,  
6 and it's been very productive. We're going to have a lot  
7 of folks out here looking at what you're doing. And, it's  
8 an exciting time. I think that's it.

9 MR. MYERS: Thank you.

10 MR. GROBE: Thank you.

11 MS. LIPA: Okay. What we're  
12 going to do now is take a five minute break and open it up  
13 for questions or comments from members of the public. Five  
14 minutes.

15 (Off the record.)

16 MR. GROBE: Okay. This is  
17 the time of our meeting when we take questions from members  
18 of the public or receive comments. And, I would like to  
19 first start with any local public officials and invite them  
20 forward if they have any questions or comments.

21 The microphone up front here should be on and as  
22 well there is a sign-in sheet, if you would. Hopefully,  
23 the pen is still there. If you would please sign in and  
24 provide any comments or ask any questions, and we'll do our  
25 best to answer them.

1 Any local public officials or representatives of  
2 elected officials that care to come forward?

3 Okay. Now, I would like to move to any local  
4 residents.

5 Either completely satisfied or timid.

6 Okay. Then open up to the floor at large.

7 MR. WARNER: Hi, Dan Warner from  
8 Magraw-Hill Publications.

9 In the early part of the session, Jack Grobe said  
10 that there was, they were, there were actions that were not  
11 consistent with NRC requirements. And I wonder if you  
12 could give us a couple examples of what those actions were  
13 and what are the requirements that were not adhered to or  
14 violated that you were thinking of?

15 MR. GROBE: Dan, was this  
16 specific to the Operations during the NOP test?

17 MR. WARNER: I believe that was  
18 the context, yes.

19 MR. GROBE: Okay, good.  
20 Scott had actually gone through those in quite a bit of  
21 detail, but let me just give one or two highlights. If you  
22 have additional questions, maybe it would be best to talk  
23 to Scott afterwards.

24 One of the requirements was, that wasn't followed,  
25 had to do with following procedures. It's a requirement in

1 the technical specifications, which is part of the  
2 operating license, and requires work that can affect the  
3 safety of the plant to be conducted with appropriate  
4 procedures and those procedures be followed. Certain  
5 activities were conducted in a way that procedures weren't  
6 followed.

7 Another violation had to do with the adequacy of  
8 procedures. And, certain procedures were determined to not  
9 be adequate.

10 In a very broad context, I think that answers your  
11 question. What I would suggest is that you get with Scott  
12 afterwards to get the details, because he can go into  
13 infinite detail.

14 Thanks, Scott.

15 The inspection report where all this is documented  
16 is already on the web. I think I signed it about a week  
17 and a half ago. It's report number 2003-018.

18 MR. THOMAS: It goes into  
19 detail.

20 MR. GROBE: So, you'll be able  
21 to find all the details in there also.

22 MR. WARNER: Okay. Another  
23 question?

24 MR. GROBE: Sure.

25 MR. WARNER: With regard to



1 the, these errors that were made in the NOP test, it seemed  
2 to have been some variation in the, in some of the  
3 statements made. It seemed like earlier there was, it  
4 seemed your statements today, that just a greater level of  
5 concern today about the implications or seriousness of what  
6 went on and some of the statements that were before. Can  
7 you just sort of talk about that?

8 It's my understanding from some previous statements,  
9 was that some of this was to be expected from an operator  
10 that hadn't been operating the plant for quite a long time,  
11 and your statements today seemed to be a higher level of  
12 concern for future, safe operation of the plant.

13 So, could you address that, please?

14 MR. THOMAS: I don't know if  
15 concern is the right word. The reason that we focused on  
16 operator performance in this last Resident Report was that  
17 it was behavior that -- it was unexpected. And, it  
18 happened at a critical time when they were, you know, they  
19 needed to perform at a high level, and there was a number  
20 of occasions where they didn't.

21 So, that's why it caught our attention and that's  
22 why the Licensee is focusing a great deal of effort in  
23 their corrective action, corrective actions to remedy the  
24 behaviors and fix procedures and that sort of thing, so.

25 MR. GROBE: Yeah, and as

1 Scott indicated earlier, each of these violations was a  
2 very low significance or minor; and the procedure that was  
3 being conducted, the Normal Operating Test Procedure, was  
4 actually being conducted in Mode 3, which means that none  
5 of the control rods, excuse me, that there was not a  
6 nuclear reaction that was generating heat. So, there was a  
7 very low threat level from the standpoint of nuclear  
8 safety. So, there wasn't a lot of safety significance to  
9 the activities as they occurred.

10 At our last public meeting, that meeting occurred  
11 very shortly after the conclusion of the test; and, some  
12 preliminary information was known at that time, but now  
13 significantly additional, significant additional  
14 information is known.

15 The Licensee completed their collective, what they  
16 call their Collective Significance Assessment and on one of  
17 the slides that they presented, it covered a whole host of  
18 input data, and it completely evaluated that and identified  
19 the scope and breadth of the issue.

20 So, I think that also provides a greater context to  
21 what's going on.

22 MR. WARNER: Thank you.

23 MR. GROBE: Thanks, Dan.

24 MR. DIRKMAN: Leo Dirkman, 4086

25 Visors.

1 Jack, you spoke a couple times about the operators  
2 and a reference to a book that's in their pocket, and why  
3 that wasn't followed. But part, it seems to me that maybe  
4 this is more of a statement, seems to me like this is more  
5 of a safety culture issue, which is precisely one of the  
6 things you're supposed to be evaluating.

7 And what are you doing? What tools are you using  
8 to be able to evaluate someone's culture and their ability  
9 to change the culture in 30 days, so they can restart this  
10 in the middle of December time frame.

11 It seems cultures take a great deal of time to  
12 change, and when you're, when you're going through a heat  
13 and pressure test and you see obvious issues where people  
14 didn't follow requirements and so forth, it's right there  
15 available immediately in their pocket. Well, then, that's  
16 a cultural thing.

17 How are we going to judge that? What kind of tools  
18 are you going to use? What kind of insight can you give  
19 the public to ensure that this culture of this, of the  
20 plant is going to be appropriate before it restarts?

21 MR. GROBE: It's, the word  
22 safety culture is a very powerful and far-reaching  
23 concept. Adherence to expectations and adherence to  
24 procedures is one part of that. I would not describe this  
25 as a safety culture problem; I would describe this as a

1 performance problem, implementation issue.

2 For a couple of reasons, the operators didn't  
3 perform successfully; and those included the fact that  
4 training that they were receiving wasn't identical to the  
5 behavior of the plant. The simulator wasn't molded  
6 correctly for a plant that had been shut down for almost  
7 two years.

8 The procedures didn't have sufficient detail. Some  
9 of the procedures actually were counter-productive. It's  
10 not that they didn't have sufficient detail; it's that they  
11 had a detail that led you closer to a challenge.

12 The way in which this test was being performed was  
13 somewhat unique. And you ended up with operating  
14 configurations in the plant that were unusual from the  
15 standpoint of what the operators would normally see.

16 All of these support structures, and FirstEnergy  
17 described them as barriers. You've got the individual  
18 barrier, the management, supervision/management barrier;  
19 I'm not sure if I'm getting these in the right orders;  
20 programs and processes barrier and oversight barrier.

21 All of those barriers didn't support the operators,  
22 and in addition to that, operators didn't realize that they  
23 were at the edge of not performing well; and, in fact, made  
24 some errors. This contributes, each of these contribute to  
25 the outcome.

1 But the bottom line is that the operators didn't get  
2 the job done. And, kind of like the quarterback on a  
3 football team, it's not necessarily fair to blame the  
4 quarterback for the team's failure, but in fact they're the  
5 quarterback.

6 So, I wouldn't describe this necessarily in the same  
7 context as the safety culture issues that FirstEnergy faced  
8 at the start of this outage. And, I believe we're going to  
9 have, a principle focus of our December 3rd meeting is  
10 going to be safety culture.

11 So, I don't see this as an onerous task. I see it  
12 as a challenge that needs to be met. It's not an easy  
13 challenge to measure. And, we had a lot of dialogue on  
14 that.

15 I think they have a good structure for measuring  
16 it. I don't know how yet I'm going to get access to the  
17 data from their measurements. And Lew Myers committed that  
18 he would find a way to make sure we got access to that data  
19 in an appropriate time frame.

20 MR. DIRKMAN: Thank you.

21 MR. KORFF: Good evening. I  
22 was here a couple weeks ago, I don't know if you remember.  
23 I'm going to, I have to hunch over on this thing. I'll  
24 have to hold the paper.

25 My name is Joseph Korff. I live in Vermilion,

1 Ohio, in the State of Ohio. Vermilion is right on Lake  
2 Erie, and I made a presentation to you at the last meeting,  
3 I believe.

4 I was going to withhold my comments to the second  
5 session, but I was prompted by the comments that I just  
6 heard. I'm going to read to you, just so we understand  
7 what happens when procedures are violated, a part of a  
8 summary of a nuclear energy agency, it's called 2002 Update  
9 of Chernobyl Ten Years Out; and it reads in part something  
10 like this.

11 "The Unit 4 of Chernobyl Nuclear Power Plant was to  
12 be shut down for routine maintenance on 25 April 1986. On  
13 that occasion, it was decided to carry out a test of the  
14 capability of plant equipment to provide enough electrical  
15 power to operate the reactor core cooling system and  
16 emergency equipment during the transition period between  
17 the loss of main station electrical power supply and the  
18 startup of the emergency power supply provided by the  
19 diesel engines.

20 Unfortunately, this test, which was considered to  
21 concern essentially the nonnuclear part of the power plant  
22 was carried out without the proper exchange of information  
23 and coordination between the team in charge of the test and  
24 the personnel in charge of the operation and safety of the  
25 nuclear reactor. Therefore, inadequate safety precautions

1 were included in the test program, and the operating  
2 personnel were not alerted to the nuclear safety  
3 implications of the electrical test.

4 This lack of coordination and awareness resulting  
5 from an insufficient level of safety culture within the  
6 plant staff led the operators to take a number of actions  
7 which deviated from established safety procedures."

8 And it goes on to say, "The culmination of these  
9 factors provoke a sudden and uncontrolled power surge  
10 which, resulted in violent explosion and almost total  
11 destruction of the reactor. The consequence of this  
12 catastrophic event were further complicated by material  
13 fires that broke out in the building and contributed to a  
14 widespread and prolonged release of radioactive materials  
15 to the environment."

16 I'm going to continue my comments in the later  
17 session, but, to me, an oops, isn't going to make it here,  
18 fellows. An oops is what caused Chernobyl, and we sure  
19 don't want it around us. And I'm not yet convinced that I  
20 heard no oops is going to happen.

21 Thank you.

22 MR. GROBE: Thank you very  
23 much for your comments.

24 MR. KORFF: You're welcome.

25 MR. GROBE: It would be

1 irresponsible on my part to ~~lead~~ **leave** anybody with the  
2 impression that the types of things that happened at  
3 Davis-Besse were anything akin to what happened at  
4 Chernobyl.

5       The specific procedural deficiencies resulting in  
6 safety systems actually in the Davis-Besse, or the specific  
7 operator reaction resulted in safety systems doing what  
8 they're supposed to do.

9       Many of the safety systems we have at the nuclear  
10 power plants in the United States don't even exist on  
11 reactors like Chernobyl. So, there is no correlation  
12 whatsoever between the nuclear safety in the United States  
13 and the nuclear safety that contributed to the Chernobyl  
14 incident.

15       So, as I said, it would be irresponsible for me to  
16 allow anybody to believe that there is some correlation  
17 between what has happened here, even for example, in the  
18 case of the reactor head degradation; that was a very  
19 serious situation from our perspective. Had that reactor  
20 head failed, there is a containment structure. There are  
21 safety systems to protect the reactor core.

22       There was no containment structure on reactors in  
23 the Soviet Union, reactors similar to Chernobyl, so there  
24 is no correlation whatsoever. The standards are different.  
25 The expectations are different. They're far higher than



1 anything you would find in the former Soviet Union.

2 MR. KORFF: Well, I just want  
3 to reiterate the report that I was reading is the Nuclear  
4 Energy Agency out of Paris, which is the consortium, which  
5 you're fully aware of and we're part of it, I believe. And  
6 it's their words, not mine. Thank you.

7 MR. GROBE: No, I  
8 understand. But I just want to make sure that nobody was  
9 correlating those words with what was going on at  
10 Davis-Besse. Thanks.

11 MR. KEITH: I just want to  
12 make a comment. My name is Michael Keith, and I've been at  
13 Davis-Besse since 1987. I was a contractor at that time,  
14 and I went permanent in '91.

15 And the, in my eyes, you know, you follow the  
16 procedure. You don't deviate. If you find a problem, you  
17 stop, you take care of it, you get it done.

18 If you find a problem that's significant, a CR, they  
19 encourage it in my shop. And I know in the other shops  
20 they do.

21 So, I just wanted to say that, I think there, the  
22 people are safety conscious, they're not perfect, but they  
23 want to do the right thing.  
24 (applause)

25 MR. GROBE: Thank you very

1 much.

2 Anybody else want to come forward? I'll give  
3 everyone a few extra seconds, because I'm having a hard  
4 time seeing if anybody is moving out there.

5 Okay. We're going to adjourn for now. And, we will  
6 reconvene this evening at 7:00, here in this auditorium;  
7 and there will be a meeting between the NRC and the public  
8 for public dialogue and public questions and comments.

9 Our next meeting is December 3rd here in the Oak  
10 Harbor High School and we look forward to seeing you here.

11 Thank you.

12 (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 23rd  
10 day of November.

11

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14

Marie B. Fresch, RMR

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NOTARY PUBLIC, STATE OF OHIO  
My Commission Expires 10-10-08.

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