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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MR. MYERS: Thank you.

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

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

Jim Powers will discuss Engineering Calculations.

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

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

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

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

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

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

Stand up, Barry.

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

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

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

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

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

That's all I have. Thank you.

MS. LIPA: Okay, thank you, Lew.

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

MR. PAPCIN: John Papcin, Ottawa County Commissioner.

MS. LIPA: Hi, John.

MR. WITT: Jere Witt, Ottawa County Administrator.

MS. LIPA: Hi, Jere.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Next month's regular monthly 0350 Meeting will be

held here on Wednesday, December 3rd.

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

MR. GROBE: Thank you, Christine.

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

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

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

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

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

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

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

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

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

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

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

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

corrective action related activities in the nuclear power industry.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Christine.

MS. LIPA: Thank you. What

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

TPCW system.

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

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

So, that's all I have.

MS. LIPA: Okay, thank you, Scott.

Next is Dave Passehl.

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

of required records and submittals to the NRC.

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

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

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

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

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

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

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

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

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

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

contributed to that submittal being incomplete and inaccurate.

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

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

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

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

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

not mention in LER.

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

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

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

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

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

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

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

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

Christine.

MS. LIPA: Okay. Thanks

Dave.

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

Also Patricia Lougheed, who is a member of the Corrective Action Team Inspection.

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

MR. GROBE: Thanks, Christine.

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

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

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

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

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

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

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

MR. MYERS: Okay. Thank you, Jack.

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

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

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

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

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

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

Jim Powers will discuss the calculations.

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

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

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

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

bottom head and top head.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

we found.

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

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

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

MR. MYERS: Yes.

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

MR. MYERS: Jim can do that.

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

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

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

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

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

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

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

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

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

MR. POWERS: That's right, Jack.

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

MR. POWERS: That's correct.

MR. MYERS: Thanks.

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

MR. POWERS: Finalized yet?

MR. THOMAS: -- developed?

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

MR. THOMAS: Thank you.

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

MR. POWERS: Yes, starting loads.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

and Jack Rutkowski, and did extensive tours of the plant. Then, we spent all day yesterday observing your Restart Overview Panel Meeting. And that meeting began at 8 in the morning and we were done a little after 8 in the evening, and I understand it went on a couple odd hours after that.

So, we've had extensive engagement by our management team both from Chicago and Washington, and we expect that to continue.

MR. MYERS: Okay. Thank you.

I would like to share with you what the Restart Oversight Panel does. What we'll share with you next time you're here that we'll focus on. The areas they're concerned with is our Power Ascension Plan. They want to review our Power Ascension Plan.

Electrical System Coordination Improvements that we discussed awhile ago; we have to finish that work and do the post-modification maintenance testing to prove that the mod works.

The Service Water Resolution, service water system right now that we're giving a lot of focus, we've got some issues outstanding on. We're working through those issues, and we want to brief on those.

Containment Air Coolers, that work is really complete, but we didn't talk about that at the meeting, so they want us to bring the Containment Air Coolers back and

discuss that.

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

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

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

Emergency Preparedness -- I'm sorry.

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

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

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

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

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

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

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

MR. MYERS: It's December 5th.

MS. LIPA: December 5?

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

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

MR. MYERS: It's getting

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

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

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

MR. THOMAS: Okay.

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

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

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

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

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

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

MR. HOPKINS: Okay, thank you.

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

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

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

Group Plan.

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

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

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

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

MR. GROBE: Okay.

MR. BEZILLA: It would be a separate plan.

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

(Off the record.)

MS. LIPA: Okay, go ahead, Jim.

MR. POWERS: Thank you, Christine.

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

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

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

The purpose of that Safety Function Validation

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

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

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

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

MR. POWERS: Right. Yes.

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

MR. POWERS: I can't give you a

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

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

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

MR. POWERS: Thank you.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

I guess if I were to point to --

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

MR. GROBE: What was the reason, Lew?

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

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

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

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

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

MR. GROBE: Let's go on.

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

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

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

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

MR. GROBE: Okay.

MR. POWERS: Okay, next slide.

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

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

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

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

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

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

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

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

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

Next slide.

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

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

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

MR. GROBE: Right.

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

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

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

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

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

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

MR. POWERS: Long term.

MS. LIPA: Thank you.

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

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

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

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

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

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

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

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

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

future.

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

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

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

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

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

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

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

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

Any questions?

MR. HOPKINS: Yeah, I have

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

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

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

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

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

helping you in that regard.

MR. POWERS: Right.

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

MR. POWERS: Right.

MR. SCHRAUDER: Right.

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

MR. POWERS: That is correct.

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

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

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

It seemed to me, the panel spent three meetings on

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

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

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

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

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

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

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

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

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

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

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

MR. POWERS: And there is a

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

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

MS. LIPA: No.

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

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

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

called into question the operability of the system, correct?

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

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

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

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

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

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

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

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

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

MR. RULAND: Thank you.

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

MR. MYERS: Yeah.

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

MR. MYERS: That's right.

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

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

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

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

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

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

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

Bob.

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

As Jack had identified, we have in our Root Cause

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

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

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

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

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

our self-assessments.

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

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

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

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

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

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

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

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

apparent cause.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MR. SCHRAUDER: Excuse me, Jack?

MR. GROBE: It covered?

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

MR. GROBE: Those were pretty busy quarters.

MR. SCHRAUDER: Yes, they were.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MR. SCHRAUDER: Cause code

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

MR. THOMAS: Okay.

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

MR. THOMAS: Okay, good, thanks.

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

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

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

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

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

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

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

MR. SCHRAUDER: Right.

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

MR. SCHRAUDER: CNRB review is new.

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

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

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

MR. SCHRAUDER: Yes.

MS. LIPA: Okay, what else?

MR. SCHRAUDER: The core group or

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

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

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

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

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

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

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

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

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

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

MR. THOMAS: Okay.

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

MR. SCHRAUDER: Yes.

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

If I understand correctly, you are doing a Restart

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

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

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

MR. MYERS: Right.

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

MR. MYERS: Yeah.

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

MR. MYERS: That's right.

MR. GROBE: Okay, good.

MR. BEZILLA: Anything else for Bob?

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

MR. SCHRAUDER: Yes.

MR. MYERS: The CARB

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

MR. SCHRAUDER: I'm sorry?

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

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

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

MR. GROBE: Okay.

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

(Off the record.)

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

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

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

MS. LIPA: Let me just add a

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

MR. MYERS: Right.

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

MR. RULAND: Not as representative of the calculations.

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

MR. RULAND: Right, right.

MR. GROBE: Okay.

MS. LIPA: Okay. Go ahead.

MR. BEZILLA: Next slide.

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

Next slide, please.

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

Leakage Program and Procedures and the FLUS Monitoring Leak Detection System, correct identified problems as is possible --

(Adjusting slide presentation.)

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

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

Next slide.

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

inspectors.

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

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

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

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

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

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

Next slide, please.

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

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

Next slide.

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

For example, in regard to our integrated operating

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

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

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

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

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

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

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

Next slide, please.

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

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

MR. RODER: Thank you, Mark.

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

Next slide, please.

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

Valley Unit One Superintendent, and two industry performance experts.

The team did a critical assessment of several areas looking at Condition Reports, observations and performance -- training performance records. Came up with five areas for improvement. Those being the Operations Oversight and Leadership Improvements, transitioning from a Maintenance focus organization to a strong Operation focus operation; implementation of our standards and expectations within Operations; strengthening knowledge and skills in certain areas; and improving our Condition Report Inspections and the timeliness of those.

Next slide, please.

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

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

Next slide.

Under the individual barrier, we took our crew men

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

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

Next slide.

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

MR. RODER: I was going to get that.

MR. THOMAS: I'll hold off.

MR. RODER: That's all right,

I'll answer it now.

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

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

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

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

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

MR. HOPKINS: Okay, thank you.

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

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

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

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

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

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

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

briefs. Part of our training is to train those reverse briefs to ensure proper performance.

The last bullet there is, we've used the systematic approach to training to address the knowledge and skills issues in the areas that were recommended by the Collective Significance Group.

Under the management barrier, we continue to reenforce adherence to on-shift roles for both the superintendent, shift manager, shift engineering and rest of the crews. That becomes very important for role clarity to understand who is providing direction to reactor operators, who is providing oversight. We saw some weaknesses in that area.

We reduced operator work hours to address any fatigue issues, and we're also training site managers to achieve more critical observations. This is another item that came out the Operational Readiness Assessment Report.

The last barrier, the Oversight Barrier; we moved the shift managers back to the control room to provide additional oversight of control room activity. Previously, for most of the outage, they've been working out of the Work Support Center, where, which is where most of the action is, most of the decisions are made.

We're also sending Operational Oversight Managers to each one of the shifts. These individuals are proven

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

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

MR. RODER: Beyond one hundred percent power.

MR. GROBE: Thank you.

MR. RODER: Next slide, please.

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

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

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

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

Next slide, please.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MR. MYERS: No.

MR. RODER: No.

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

MR. THOMAS: Okay.

MR. MYERS: Okay?

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

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

MR. GROBE: Okay.

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

MR. GROBE: Okay.

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

MR. RODER: That's correct.

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

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

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

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

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

MR. GROBE: Okay.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MR. RODER: Which barrier?

MR. THOMAS: Between Bravo and reactor trip.

MR. RODER: Are you asking what barriers?

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

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

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

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

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

MR. MYERS: You wouldn't.

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

MR. MYERS: Yeah.

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

MR. MYERS: Absolutely.

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

do you get feedback from those people?

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

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

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

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

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

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

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

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

MR. GROBE: Will INPO be here

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

MR. BEZILLA: I don't believe so. They're going to be here from December 1 through 4. They may have a representative or two here, but that's not been solidified at this point.

MR. MYERS: But to answer that question, Restart Readiness Review. We won't heat up until we bring these advisors in and look at the training and convince ourselves that we're ready to heat up.

MR. GROBE: Right. I understand that, Lew.

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

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

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

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

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

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

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

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

MR. MYERS: Right.

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

MR. MYERS: Yes.

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

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

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

MR. GROBE: Can I make an

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MS. LIPA: That's right.

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

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

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

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

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

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

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

MR. PRICE: Right.

MR. MYERS: What if it's earlier?

MR. GROBE: Pardon me?

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

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

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

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

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

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

Then on following page, next slide, please.

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

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

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

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

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

Any questions?

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

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

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

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

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

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

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

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

MR. SCHRAUDER: Say again?

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

MR. SCHRAUDER: Yes.

MR. GROBE: Good.

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

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

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

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

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

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

Thank you.

MR. GROBE: Okay. Any comments from anybody?

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

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

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

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

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

MR. MYERS: Thank you.

MR. GROBE: Thank you.

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

(Off the record.)

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

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

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

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

Either completely satisfied or timid.

Okay. Then open up to the floor at large.

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

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

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

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

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

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

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

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

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

Thanks, Scott.

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

MR. THOMAS: It goes into detail.

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

MR. WARNER: Okay. Another question?

MR. GROBE: Sure.

MR. WARNER: With regard to

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

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

So, could you address that, please?

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

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

MR. GROBE: Yeah, and as

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

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

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

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

MR. WARNER: Thank you.

MR. GROBE: Thanks, Dan.

MR. DIRKMAN: Leo Dirkman, 4086 Visors.

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

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

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

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

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

performance problem, implementation issue.

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

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

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

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

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

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

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

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

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

MR. DIRKMAN: Thank you.

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

My name is Joseph Korff. I live in Vermilion,

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

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

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

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

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

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

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

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

Thank you.

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

MR. KORFF: You're welcome.

MR. GROBE: It would be

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

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

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

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

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

anything you would find in the former Soviet Union.

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

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

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

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

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

So, I just wanted to say that, I think there, the people are safety conscious, they're not perfect, but they want to do the right thing.

(applause)

MR. GROBE: Thank you very

much.

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

Okay. We're going to adjourn for now. And, we will reconvene this evening at 7:00, here in this auditorium; and there will be a meeting between the NRC and the public for public dialogue and public questions and comments.

Our next meeting is December 3rd here in the Oak Harbor High School and we look forward to seeing you here.

Thank you.

(Off the record.)

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CERTIFICATE

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

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office at Norwalk, Ohio, on this 23rd day of November.

Marie B. Fresch, RMR

NOTARY PUBLIC, STATE OF OHIO
My Commission Expires 10-10-08.