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, September 10, 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
David 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 - Davis Besse

FIRST ENERGY NUCLEAR OPERATING COMPANY

Lew Myers, FENOC Chief Operating Officer
James J. Powers, III
Director - Nuclear Engineering
Mark Bezilla, Vice President/Plant Manager
Steve Loehlein,
Manager - Nuclear Quality Assessment
Rick Dame - Reliability Unit Supervisor

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MR. PASSEHL: Welcome to FirstEnergy and members of the public for accommodating our meeting today. This is a public meeting between the NRC Davis-Besse Oversight Panel and FirstEnergy Nuclear Operating Company.

My name is David Passehl. I'm a Project Engineer and Assistant to the Branch Chief Christine Lipa. Christine is unable to join us today, so I will be discussing the agenda today.

Next slide, please.

The purpose of this meeting is to discuss the NRC Oversight Panel activities, focusing on those activities since our last public meeting, and to allow FirstEnergy to present the status of activities in their Restart Plan.

Next slide, please.

Today's agenda will cover an introduction and opening remarks, a brief summary of the August 12th public meetings. We'll be discussing significant NRC activities since the August 12th public meeting. We'll hear the Licensee's presentation on the status of their Return to Service Plan. We will adjourn the NRC meeting with FirstEnergy, have a short break, and then hear comments and answer questions and finally we'll adjourn the meeting.

First, before we get started, I would like to make some introductions. Jack Grobe to my left is the Senior

Manager in the Region III Office in Lisle, Illinois, and he's the Chairman of the Davis-Besse Oversight Panel.

Bill Ruland to his left is the Senior Manager and is the Vice Chairman of the Oversight Panel. Bill's position is Director, Project Directorate 3 in the Division of Licensing Project Management at our headquarters office.

Jon Hopkins to Bill's left is the Project Manager for the Davis-Besse facility. He works in our headquarters office.

Scott Thomas to my right is the Senior Resident Inspector at Davis-Besse.

Jack Rutkowski who is not here is another Resident Inspector; and we just hired a third Resident Inspector, Monica Salter-Williams.

MR. GROBE: Why don't I introduce Monica.

Would you stand up? There you are. Don't sit down yet.

Monica has just joined us this week. She's moved her family here to the area, which is outstanding. Monica comes to us from our Region 1 Office. She's got a Bachelor's degree in Chemistry and Master's degree in Nuclear Engineering from Penn State University, and worked at the Three Mile Island Plant for a couple of years prior to joining the Regulatory Commission.

She joined as an Intern Engineer in Region 1 Office in Philadelphia, Pennsylvania, and received her inspector training in that office, and just recently was qualified as a fully qualified inspector, which is quite a significant accomplishment.

And we're very glad to have Monica and her husband and her five year old son here with us. Take a good luck at Monica. You're not going to see her very often, because usually what you'll see is her going by in a motorcycle. And, that will probably be at a fairly high rate of speed.

So, Monica has joined us and she's going to be the third member of the Davis-Besse team that will be at the plant every day inspecting the facility.

That's unusual to have three Resident Inspectors. Most of the nuclear power plants in the United States have two, but because of the challenges faced by the Licensee, the increased oversight that the NRC is providing, Monica has been assigned as the third Resident at Davis-Besse.

So, welcome, Monica.

MR. PASSEHL: Thanks, Jack.

Also, Nancy Keller is the Davis-Besse Resident Office Assistant and she's in the lobby, making sure everybody gets slides and that.

Also, Jan Strasma, who is our Region III Public Affairs Officer, he's here.

And, we were expecting our State and Government Affairs Officer to come here. He was delayed however, and he had with him the monthly newsletter. So, when he gets here, we can distribute copies of the monthly newsletter.

Also, I wanted to say, in the monthly newsletter, there was, there may be an error. The next 0350 Public Meeting for Davis-Besse will be at Camp Perry on October 7.

I think that's all the NRC.

Lew, could you introduce FirstEnergy, please.

MR. MYERS: Sure.

At the end of the table is Rick Dame. Rick is from our Perry plant. He spoke at our last meeting. Rick is the Restart Test Manager. As you know, we're in the mode of heating up our plant. We'll talk about that today and taking it up for the 7-day Pressure/Temperature Test.

Rick's job was to prepare that test which we have approved today; and then to step back and work directly for me and Gary Leidich in an assessment role, and we're going to monitor our process and proceed through this new performance area during the 7-day cycle. So, Rick today will be discussing that.

Jim Powers is the Director of Engineering. He is sitting next to me on my left.

Mark Bezilla will talk about the plan and status

today.

And then, Steve Loehlein, at the end of the table, is Manager of Quality Assurance and he'll discuss those areas.

MR. PASSEHL: Thank you, Lew.

At this time, I would like to ask for introductions of public officials or representatives of public officials.

MR. WITT: Jere Witt, County Administrator.

MR. PASSEHL: Anyone else besides Jere?

Okay. Thank you.

As I said, this meeting is open to public observation. Please note that this is a meeting between the Nuclear Regulatory Commission and FirstEnergy. 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 from members of the public and answer questions.

The newsletter, when it gets here, will provide some background information and discuss the current plan of NRC activities and it's a good resource to learn about what activities have been ongoing in the last month.

On the back page of the newsletter there is some reference information on how to contact us if you have

questions or concerns, and we've included the email address and phone number for our Public Affairs Officers, and there also is a web page address where individuals can read and have access to numerous public documents about Davis-Besse.

In the foyer, we also have a Public Meeting Feedback Form, which we use to solicit comments and on aspects of the meeting that we can improve on.

We're having the meeting transcribed today by Marie Fresch to maintain a record of this meeting. The transcription will be available on our web page in about 3 to 4 weeks. And, please keep in mind, it is important that speakers use the microphones to ensure that Marie and the audience can hear.

Next, I would like to briefly describe the August 12th public meeting, which was our last public meeting, during which we provided a status update on our Restart Checklist and Inspection Activities.

In today's presentation, we plan to provide an update on the Checklist and also on our recently completed and ongoing NRC activities.

FirstEnergy provided an update on efforts toward restart. They discussed the High Pressure Injection Pumps, Debris Issue, and the new Electrical Distribution System Software called ETAP.

They discussed the Plant's Readiness for Mode 3 Pressure and Temperature Test, which is about 2155 pounds per square inch and 530 degrees. They also discussed what this test is expected to accomplish.

They also provided a status on results from Safety Culture Assessments and their readiness for entry into Mode 3. Lastly, they discussed observations and assessments by the site's Quality Assurance Organization.

The transcripts from that meeting are available on our website.

Next slide, please.

Since the August 12 meeting, we closed Restart Checklist Item 2c1, which entailed the Emergency Core Cooling System and Containment Spray System Sump. The Davis-Besse Oversight Panel approved this checklist item for closure on September 2nd. We inspected the new sump and our, the results of that inspection can be found in our Inspection Report 03-06, 2003-06.

The only remaining item from that inspection was to complete a review of the technical adequacy of certain calculations, which we identified as a concern in that Inspection Report. We've completed that review and determined that FirstEnergy addressed our concerns.

Closure of that item will be discussed in the NRC Inspection Report 03-17, which is due to be out in the next

couple weeks.

We also closed Restart Checklist Item 6g, which was a License Amendment Request by FirstEnergy to relocate their high pressure and low pressure injection flow balance testing from a Technical Specifications to the updated Safety Analysis Report.

We are also in the process of updating our Confirmatory Action Letter to address two items. The first item concerned quarantine of material from the reactor pressure vessel head and control rod drive mechanism nozzle penetrations that were necessary to address the root cause of the head degradation.

NRC has received nozzle specimens and those have been sent to a laboratory at Northwest and they have been inventoried and the reactor vessel head has been shipped to a low level waste repository.

Also -- next slide, please.

MR. GROBE: Dave, before you go on. There is one other item that's been accomplished since the last meeting that was accomplished since these slides were prepared, that has to do with a license amendment that was issued last Friday.

FirstEnergy requested a license amendment to conduct the Mode 3 Normal Operating Pressure and Temperature Test, with the existing high pressure injection pumps prior to

the modification to address the concern that was identified regarding some internal components in the pump. That license amendment was approved and issued Friday.

From the NRC's perspective, all of the checklist items that need to be addressed prior to Licensee commencing this test have been accomplished.

MR. PASSEHL: Okay. I wanted to discuss some continuing NRC activities. First, being the System Health Reviews and Design Issues. This is an inspection that we conducted that evaluated the safety function of various systems and topical issues, such as high energy line breaks, equipment qualification, seismic flooding and ~~Intensive~~ 10CFR50, Appendix R, which deals with fire protection.

This inspection was conducted by several inspectors and we held an Exit Meeting with FirstEnergy to discuss their results. The report should be available in a few weeks.

We also performed an inspection of the site's Corrective Action Process to ensure that this process is being effectively implemented and appropriate corrective actions are being taken to prevent recurrence of problems.

This inspection included a review of Restart Corrective Action items to determine if items required to be accomplished prior to startup of the plant had been

correctly characterized and actions had been completed in accordance with the Licensee and NRC requirements.

We also held an Exit Meeting with the Utility yesterday and discussed the results of the inspection, and that report should be available in a few weeks.

We continue to perform an inspection of the site Safety Culture and Safety Conscious Work Environment area, where we're evaluating the Licensee's process and tools for monitoring improvement in Safety Culture and Safety Conscious Work Environment and the effectiveness of the Employee Concerns Program.

That inspection, as I mentioned, is in progress. And on April 7th of this year, we issued a press release that has biographical information on the members of the team.

Also, we continue to perform inspections by our Resident Inspectors. As we introduce the three, they are stationed permanently at the site and they inspect a broad range of activities covering in the areas of Operations, Maintenance and Testing. The Resident Inspectors issue an inspection report every six to seven weeks.

MR. GROBE: Let me just comment on the first two inspections that Dave identified; that is, the System Health Inspection and Corrective Action Team Inspection. Those two inspections are very important

activities. They were conducted by quite a number of staff over a long period of time.

The Corrective Action Inspection began in March and the System Health Inspection began earlier this year. The number of inspectors, for example, on the Corrective Action Team Inspection, is that inspection has involved ten inspectors with well over two hundred years of experience in nuclear power operation.

The results that were presented during the Exit Meeting yesterday by those inspection teams are preliminary results. Those need to be reviewed by regional management and then presented to the panel by the teams. And the panel will evaluate the results of those inspections and make a final determination on whether they are sufficient to address the checklist items.

Consequently, it's not appropriate at this point in time to discuss the preliminary results of those inspections; however, we are planning and expect a specific meeting to discuss the results of those inspections, because those two areas are very important to the closure of the Restart Checklist.

Sometime in the near future we'll be identifying a public meeting time and place to discuss the results of those inspections.

Thanks, Dave.

MR. PASSEHL: Okay, next slide, please.

Okay, I wanted to cover some upcoming activities that the NRC is undertaking.

We are preparing to conduct an inspection of the lower reactor vessel head area. This inspection will review procedures and related ASME code requirements relative to the leak test of the Reactor Coolant System. The NRC will also observe conduct of the tests and verify proper implementation of procedures. There is a fuller description of this in the monthly newsletter.

The NRC is planning to conduct a meeting to discuss the Licensee's Assessment of Safety Culture, once the Licensee has fully integrated their independent and internal assessments. The meeting is currently scheduled to be held in the Region III Office on October 1st.

The NRC is preparing to conduct an assessment of the Licensee's efforts to address Restart Checklist item 3i, which is the process for ensuring completeness and accuracy of required records and submittals to the NRC. The results of this inspection will enable the NRC to gain confidence in the quality of the Licensee's submittals, such that the NRC can have reasonable assurance in the completeness and accuracy of the Licensee basis and other important communications to the NRC.

The NRC is also performing follow-up reviews of potentially risk significant issues regarding the Containment Emergency Sump and the High Pressure Injection Pumps. In the NRC Inspection Report 03-15, we discuss a finding associated with ineffective Corrective Actions related to unacceptable Containment coatings, fibrous material, and other debris. This resulted in the inability of the Emergency Core Cooling System Sump to perform its safety function under certain postulated accident scenarios due to clogging of the sump screen.

We are also following up a finding that was discussed in Licensee Event Report 2003-02 associated with their high pressure injection pumps being incapable of maintaining suction from the Containment Emergency Sump via the Low Pressure Injection Pumps during high pressure recirculation. As I mentioned, that is discussed in the ~~OER~~ LER. Oh, also is discussed in Report 03-15 as well, 2003-15.

And also, the last thing I wanted to mention, is the NRC is preparing to conduct a Restart Assessment Team Inspection when the Utility nears the point where it will seek NRC authorization for restart. The inspection will review the readiness of the plant and the plant staff to resume plant operations safely and in compliance with NRC requirements. The inspection findings will be considered

by the NRC Oversight Panel in making its recommendation to the Regional Administrator on possible restart.

MR. GROBE: Thanks, Dave.

Just a couple more observations. We don't like to conduct meetings outside of this local area, because we know that there is a large amount of interest in the local population regarding the activities going on at Davis-Besse. Occasionally, we found it necessary to conduct the meeting either in our headquarters office in Rockville or the Region III Office in Chicago.

The upcoming Safety Culture Meeting will be conducted in Chicago because of the need to have additional staff management at that meeting. Instead of bringing them all out to here, we need to conduct the meeting, it's more effective to conduct the meeting in Chicago. As we've done in the past, we will have both audio and video teleconferencing of that meeting.

So, if you're here in the local area and you're interested in that meeting, you can participate both by listening to the meeting via telephones, free 1-800 number; and also participate in the question and answer period after the conclusion of the business portion of the meeting through the telephone lines.

In addition to that, the meeting will be available to the public in our headquarters office in Rockville

through video teleconferencing. We felt it was important to make those opportunities since we're taking this meeting out of the local community here.

The other thing I wanted to mention, and Dave was too humble to mention this. He is leading the Restart Assessment Team Inspection; and that will be a team of operation experts and engineering experts that will do the final evaluation of the readiness of the Davis-Besse Plant to move from a shutdown mode of operations to a restart operations, mode of operations.

And that inspection is not currently scheduled, because we don't know when restart might be, but we just put it on the slide here to make you aware that that's an upcoming inspection.

It will be a fairly large team inspection. They will be observing plant operations around the clock for several days to gather a sense of the readiness of the plant to return to an operational configuration.

Thanks, Dave.

MR. PASSEHL: Thank you. And that completes our portion of the presentation. So, with that, I would like to turn it over to FirstEnergy.

MR. MYERS: Thank you.

There are a couple people in the audience. We have, from our corporate organization, we have Mary O'Reilly with

us today. Mary is our corporate legal group.

And, Fred von Ahn, the VP of Quality Assurance, is also in the audience.

And Bob Schrauder is here, and he's supervising the HPI Project, so that's on the schedule today. So, you know Bob is here too, if there is any questions in that area.

If you're ready to get started, our Desired Outcome today, we have an agenda where I thought I would take a few moments and discuss the, the loss of transmission that we experienced since the last meeting. That ought to be interesting. And the response of Davis-Besse and our other plants during that time.

Mark Bezilla will discuss the plant status today.

Jim Powers will talk about some of the technical issues that are still ongoing and they're coming to closure.

And then Operational Readiness Assessment Plan, Rick Dame will discuss that. And as we said, that is underway as we speak.

Then Steve Loehlein will finally give a prospective from the Quality Assurance Program; and then I will come back and summarize.

Our Desired Outcomes today -- next slide. The plant systems are being inspected and tested for restart. We've already completed the Containment Pressure Test, which is

part of our Restart Test Plan. Containment Pressure Test was done very successfully and the leakage rate was probably one of the lowest we've seen in the history of the plant.

We've also completed 250 pound pressure test of our nuclear reactor, when we pressurized the reactor up to 250 pounds run on reactor coolant pump. At this time, plant systems are being inspected and the ~~net~~ next plateau is 2155 pound pressure test, which is our normal pressure. And we'll heat the reactor up to about 532 degrees and maintain it there for about 7 days. And, we'll discuss that more in our presentation today.

Once again, we want to discuss our technical issues that we've addressed at the plant; and most, if not all of the technical issues are coming to closure. There's still a couple of outstanding things, like the ~~API~~ HPI pump that we have to go install and Bob is working hard on that on the test that we have going on.

Then we have the ongoing assessments that we will be performing during this Pressure Temperature Test, along with some other tests that we have to monitor our people, our plant, and our processes, and ensure that nuclear safety is maintained and we operate the plant event-free.

We think that sets us up to develop a rapport that we will provide to our Restart Oversight Panel, Gary

Leidich, and myself; and then if, with corrective actions after that, we would be ready to turn to the NRC to ask for restart.

With that, we're prepare to get started. If you would like, I'll start out talking about the plant response on the loss of grid.

Shortly after 4 p.m. on August 14th, the electric power at our switchyard was lost. We had the opportunity to implement our emergency plan procedures as part of that process, and this type drill meant physically implement the procedures.

Our overall conclusions were that our equipment at the plant performed as designed. In fact, it performed very well. The Davis-Besse plant was in Mode 5. The fuel was in the reactor, with the reactor head installed during that time.

The decay heat train ~~too~~ two was in service providing core coolant. At the time, we issued both emergency diesels start, started as desired; load to your bus, and ran throughout the time of the event. All of our systems at our plant performed as designed. And, once again, we were pleased with the overall performance of our system.

The initial response to the event was in accordance with our Emergency Preparedness Program. We have that in place and that we drill all the time. We classified the

event as an unusual event, ~~as~~ at 1621. Our offsite notifications were made in a timely manner.

The Emergency Response Organizations consisting of what we call our Technical Support Center was manned, our Operator Support Center was manned, and the Emergency Control Center was manned. We went beyond the requirements to man those centers and those centers were manned to provide station support.

The Perry Station was also operating at that time at a hundred percent power, and ~~trip power~~ tripped when power was lost, and performed similar.

Our Beaver Valley Plant was operating, had to reduce power for a short length of time, and then, then returned to a hundred percent power until after the event was over with.

At 1621, I think, on the 15th, we decided, we declared the event over with. We returned -- the diesel performed its action well. We returned, once we decided both plants were stable and the grid was stable; that's what we were watching voltage ~~preparations~~ variations of the grid for a couple days before we returned to our normal power, per power source was the grid; and we did that at 1621 on 8-15.

With that, that's all I have.

MR. GROBE: I have one

question for you, Lew.

MR. MYERS: Sure.

MR. GROBE: There is a lot of effort to, there is a lot of effort right now focused on trying to understand what caused an unprecedented power outage in the northeast and southern part of Canada. What are your plans on evaluating the information that's gained and learned from the evaluation of the cause of this event, and incorporating that into the probabilities of loss of outside power included in your Probabilistic Risk Assessment for the plant?

MR. MYERS: You know, Jack, that's, as part of our ETAP program, we have to look at grid stability and look at the probabilities of loss of power like this. We won't know anything until all the facts are gathered, what caused this loss of power, and where the actions of companies, our company as well as other companies, will be taken. And once we look at all that, we'll go back and redetermine where our stability factors of our grid are at the time.

And so, we'll look at the, the actions that our company would take, because it was a combination of many events that caused this situation.

MR. GROBE: Okay, thank you.

MR. BEZILLA: Thank you. Our

next slide, please.

My Desired Outcome for today is to demonstrate to you that our preparations for this Normal Operating Pressure Test is thorough, well planned, and comprehensive.

Next slide, please.

(mike problem)

MR. BEZILLA: Okay, I'll start over. My Desired Outcome for today is to demonstrate to you that our preparations for this Normal Operating Pressure Test is thorough, well planned, and comprehensive.

Next slide, please.

The plant is currently in Mode 5. Reactor Coolant System is around 110 degrees and we're heating it up and we're about two hundred pounds per square inch in the Reactor Coolant System.

We're in the progression through the remaining activities required to be completed for entry into Mode 4; and Mode 4 is Reactor Coolant System greater than 200 degrees; and we anticipate making that mode change late tonight or early tomorrow.

What we have in front of us is final venting of the Reactor Coolant System, making sure all our testing and paperwork is in place. One final check, to make sure we're

in accordance with our tech specs and license amendment requests; and then we'll start the first two reactor coolant pumps and start heating up and pressurizing the Reactor Coolant System.

Next slide, please.

During the Normal Operating Pressure Test, our focus will be on the following:

Nuclear Safety, our ability to ensure that the reactor core remains covered and cool.

Our People, their attitudes and behaviors.

Our Plant, how well the systems, structures and components perform.

And our Processes, how they enable our, how they enable and guide our people in their performance of their tasks and assignments.

Next slide, please.

Our expectations of our people during this Normal Operating Pressure Test are as follows:

First, that Nuclear Safety is first and foremost in their thoughts and that they ensure issues receive the attention warranted by their significance.

That they be prepared. For example, they preview each task and assignment. They verify that they have the tools and materials needed to do their tasks. They conduct preevolution briefs. They know what success looks like.

And that they can recognize issues and problems. And that they know what to do if faced with adversity.

Another expectation of our people is that they communicate. For example, that they use three-way communication to ensure that they have been understood or that they understand. That they report any issues immediately to their supervisor; and if it's a plant equipment issue, immediately to the control room. That they provide complete and accurate information. And finally, that they be accountable. For example, they self-check their work. They peer check others work. They make sure that each tasking job is completed. The paperwork is completed. They exhibit a questioning attitude. They identify mistakes and errors and use our Corrective Action Process. That they're reliable and that they own the outcome of their efforts.

Next slide, please.

This next slide just depicts, I'll say, the Management Team. I'll say a piece of the Management Team, but a focused piece of the Management Team that will be in place for this Normal Operating Pressure Test.

As you see, Lew will be filling the Site Vice-President role. I'll be Director of Operations. Mike Roder is Manager of Operations. And we have a Normal Operating Pressure Test Team, and I'll get to that in a

minute on the next slide.

We have Jim Powers, Engineering Organization, providing support as needed through the evolution. And, then we have Mike Stevens, our Director of Maintenance; and Greg Dunn, our Manager of Work Control. Greg's working day shift; Mike's working night shift; and we have our Outage Control Center manned up to be able to support Mike and his team if there are any anomalies or issues that are encountered on the heatup and pressurization, the stable period, and then the cooldown and depressurization of the plant.

Off to the left here, you'll see that we have Rick Dame, as we talked about Independent Assessor, and Steve Loehlein, Manager of Quality Assurance and his team. What these individuals will be doing will be taking a look at the, us, our people, and our behaviors, and I'll say attitudes and approach to solving problems, as well as our processes and how well those processes enable our people to work through solutions and issues. And both Rick and Steve will talk a little bit later in the presentation about what they're going to be doing during this Normal Operating Pressure Test.

Next slide, please.

Okay, this is a little finer look at the Normal Operating Pressure Test Team. Again, we have our Manager

of Operations, Mike Roder, in charge of the plant.

We have Test Directors on day shift and night shift and those are the conductors, the orchestrators of the evolution.

We have a couple of assistants. Those guys will back up, spell the Test Directors, as well as take care of all the Post Maintenance Tests that we're going to be doing during this Normal Operating Pressure Test.

You can see we have three specific teams. First team is Boric Acid Inspection, part of our Restart Test Plan, has us go back at 2155 pounds, which is normal pressure in the system and they'll inspect over a thousand pieces, parts, if you will; checking flanges, checking bolted connections, checking valves, and other type equipment.

We got teams set up. Again, we have day shift, night shift. We have a number of inspectors that have been trained and are ready to perform the tasks. They've reviewed what components and things they need to look at.

What we plan on doing is when we get to 2155 pounds, we'll have them go out and take an initial look; and in about three days into the stabilization period, we'll have them go back out and I'll say do the four score inspections of the system. Okay.

Again, those guys, we have a couple of the system

managers, again, to spell them and provide additional management focus for those teams.

Middle group here, Reactor Coolant System Sensitivity Leakage. We have again Test Managers and Test Support Groups, which consist of chemistry personnel and radiological protection personnel.

What we will do during this test period is a couple different things. First off, we'll do a long-duration Reactor Coolant System Leak Rate Test. And part of that test puts in known leakage. Then we run our program and see if that program can identify the known leakage and how accurate it can get to measure that quantity of Reactor Coolant System leakage.

And then, the additional activity we'll perform during this test is we've installed a new reactor coolant leakage monitor device known as a FLUS Monitor. And that item is, the detector is physically located underneath the vessel, and then the monitoring equipment is located in the basement of the building over underneath one of the stairwells.

What we'll do is put in some, we'll increase the humidity at the detector and then we'll be able to analyze to see how sensitive that monitor is and how low humidity change it can detect underneath the vessel. It will give us an indication of potential leakage in the vicinity of

the bottom part of the reactor vessel.

Lastly, as part of our team, we realize there is going to be some opportunities and challenges on the way up. We're going to have some valves that leak. We may have some flanges that leak. There may be some other equipment issues that arise as we heat up and pressurize the system and as we're stable and then as we cool down and depressurize.

What we've done is set up some immediate response teams. We've got engineering support, we have maintenance support, we have radiologic protection support. So, if there are any immediate issues, at these individuals disposal are teams that are prepared to go out and assess those problems, use our Problem-Solving Decision-Making Process, if required, and then hopefully be able to remediate and address whatever those issues may be.

So, that's our Normal Operating Pressure Testing. And most of those functions are in place. The remainder will be in place today and/or tomorrow.

Okay, next slide.

MR. RULAND: Mark, could you clarify for me, when you say you're establishing a known leakage rate, how you actually do that?

MR. BEZILLA: We'll establish a Reactor Coolant System sample and we'll be able to monitor

that and be able to determine what that sample flow rate is and go ahead and run our program and it will be able to, it will say half a gallon a minute or a tenth of a gallon per minute and it will compare that to the known leak rate that we established. So, it will be through the samples is how we'll establish that.

MR. RULAND: Okay, great.

MR. BEZILLA: Okay. Another question?

MR. RULAND: Well, I wanted to make sure --

MR. BEZILLA: I'm not going to go --

MR. RULAND: I just wanted to make sure you were. Good. Thank you.

MR. BEZILLA: Normal Operating Pressure Test; already talked a little about the conditions right at, around 532 degrees, which is normal, normal no-load temperature. And then the Reactor Coolant System pressure around 2155 pounds per square inch.

And, as I said, we initially get up at 2155. We'll perform a walkdown. And there is over a thousand components and pieces and parts that we'll go look at to make sure we know the status of those components. If there is any issues, we'll address those at the time.

And, then, about three days into it, we'll go ahead and repeat those inspections and that will give us a little bit of soak time on the plant and we'll be able to identify if there is any minor ~~web page~~ weepage or anything like that from those specific components that we're looking at. Okay.

Then, also, during this 7-day test, we'll be able to perform Post Maintenance and Modification Testing. We've done as much testing as we can do in the current state, but we need pressure and temperature to be able to complete some of those inspections and tests.

All right, last thing, is during this timeframe, it will give us a chance to see how we respond in more of a normal mode of operation. And if the plant behaves and doesn't provide some of those opportunities as we're heating up, as we're stabling, as we're cooling down, Rick and Steve's groups will run some exercises on us and see how we perform. They'll talk a little more about that shortly.

Next slide, please.

So, what's this Normal Operating Pressure Test going to do for us? I believe it's going to help demonstrate confidence in our plant systems and equipment. In preparation for this test, we've done a lot of work. I'll get to that. I have a slide that just rolls that up. I'll get to that.

We've done a lot of work. And from a safety equipment standpoint, to enter Mode 4, we have to have proven to ourselves that all that equipment will function if needed, and so we're in the final stages of completing that testing, as I said, completing the paperwork, so we can appropriately raise temperature above 200 degrees and enter Mode 4.

So, we'll have check down on Safety Features Actuation System, which is a lot of the safety equipment designed to protect the fuel if we have an accident or some condition where it would require it to work.

Our Reactor Protection System, which essentially monitors the number of parameters within the plant and will cause automatic shutdowns of the reactor. In this Normal Operating Pressure Test, we won't be using the fuel in the reactor. We'll have lots of shutdown margin, if you will, but nonetheless, we want to make sure that system is ready to go. And pieces of it are required in Mode 4 and Mode 3, some of it is not required until Mode 1 and 2, but we'll have it thoroughly checked out.

Then, also, our Feedwater Line Rupture Control System -- Steam and Feedwater Line Control Rupture System; this helps mitigate any kind of steam ~~ilke~~ leak on the secondary plant to again ensure that the fuel remains covered and cool.

So, we'll check those all out and have done the required testing. So, we'll have good confidence in those systems prior to changing modes.

From our Primary Systems standpoint, Lew talked about in his opening remarks having conducted the 250 pound -- the 250 pound test on the Reactor Coolant System. That gave us some confidence that our systems will be okay, but this, I will say, is the dress rehearsal for actual restart. It will bring the plant up to normal pressure and close to normal temperature and that will give us a much better feel of the equipment and the things we worked on, if we have any additional component problems or equipment problems.

I've already talked about validating our Integrated Leakage, Reactor Coolant System Leakage capabilities, as well as the FLUS monitoring. And, from a secondary systems standpoint, we have put steam on the main turbine seals, we've drawn vacuum, we've exercised a number of those components, but it's been awhile since we had the main steam pipe hot and we've had that system pressurized. And by doing this Normal Operating Pressure Test, we'll be able to check out a lot of the fluid systems on the secondary plant and look for any component deficiencies or deficiencies that we might have in the secondary plant also.

Okay, next slide.

Some of the inspections that we'll be doing on the primary side, once we get up, actually we're going to watch it as we come up, but when we get up to full pressure and near normal temperature, we'll be checking out Reactor Vessel flange and the O-rings and between the O-rings on that connection.

Reactor Head Control Rod Drive Mechanism, checking the nozzle penetrations. We've installed view ports on the head, so we can get a pretty good look at those nozzle penetrations even when the reactor is up and hot. Of course, not with nuclear reaction going on, but we can get a view during this one.

And also the flanges associated with those Control Rod Drive Mechanisms, we think we've solved leakage problems there, but this will be a good opportunity to check for us also.

The Bonnet Nozzles, Reactor Incore Monitoring Instrumentation. We have a couple cameras set up underneath there, so if we have any significant leakage, we'll be able to see that through the insulation. And I believe, when we're hot, we're going to take a couple peaks under the insulation, but we'll do a thorough check when we're done with that, we'll pull the insulation and look closely at all those penetrations.

We'll take a look at our Steam Generator, our Pressurizer manways and hand-holes. Those can be subject to leakage at times. We want to make sure we have good torques on those.

Reactor Coolant Pump covers and seals. Those are always areas you want to be careful of. So, we'll check those out. We have a pretty robust plan for Reactor Coolant pumps; you put the lid on, there is a gasket there, and between those seals, leak monitoring capability. We have a pretty aggressive plan to go check those and watch to see if there is any leakage on the way up. If there is leakage while we heat it up, then there's leakage on the way down.

Sometimes you can get some leakage on the way up or on the way down on those joints, because the metal expands and contracts. Typically, if you have any minor leakage on the way up or on the way down, when you get up at full pressure, near temperature, you don't have any more leakage.

So, we have a pretty aggressive plan to go check that out, specifically on the two pumps that we just worked on taken apart and on the two pumps that we haven't taken apart.

Then our Reactor Coolant System -- or Pressurizer Heaters, there is flange joints there we will be checking,

and Pressurizer safety and relief valves. Again, we'll check those connections, and then we'll also check for any true leakage we might have on those components, because that's something we want to take care of prior to restart if there was any leakage there.

And, numerous, like I said, there is a thousand plus things we're going to be looking at; Reactor Coolant System valves, packing associated with those valves, and again, bolted connections and flanges.

Okay, so, those are just some of the checks we'll be performing.

Okay, next slide, please.

This is just a pictorial of the plant. In the Auxiliary Building, that houses a lot of the safety systems that I talked about earlier, and we've done a number of modifications, a lot of work on those, and we're in the final testing of those components to make sure they're ready to support mode change and its Normal Operating Pressure Test.

We've been inside Containment. I'll talk a little bit about some of the things we've done in Containment. We've been pouring over that, making sure it's as clean as it can be. And it's probably in the best shape it's been in, in 25 years. So, we think we've done a good job there, not only from a housekeeping standpoint, but also from a

radiological standpoint.

And with the exceptions of a few areas, we can probably walk in there in street clothes today. I know that the desire, once we get through with this, once we finish up, whatever work might be needed to be done, that we would like to go in there in street clothes.

Lastly on the turbine side, that's the power generation side. Again, we'll get a good chance to check it out and see what its health looks like. It's been pretty much out for the last 16 to 18 months, so we'll get a chance to check that out.

Cooling Tower is in service and you might see a little coolant there, not a whole lot when we check, but there might be a little bit there.

So, that's a little pictorial on the plant.

Okay. Next slide, please.

Accomplishments. Some of this is a repeat from previous meetings, but I think it's worthwhile going through this. Some of these we had to do. Some of these we've chosen to do to improve our margin of safety at the Davis-Besse plant.

We replaced the Reactor Pressure Vessel Head.

We improved the Containment Emergency Sump. We probably have the, we probably have the most robust sump in the PWR industry right now. We're pretty proud of that.

We modified our High Pressure Injection Pump Recirculation Line. There are some scenarios, some accident scenarios, where we would have to align the high pressure injection pumps off the low pressure injection pumps while they're taking suction from the Containment Sump. And we've put in a modification now to allow those pumps to have good minimum flow protection while they're in that mode. And, although, we don't expect to need that, it's there if you would need it.

We painted the Containment Dome. We believe we have the dome in good shape from a coating standpoint.

As I said, we've installed the FLUS Online Leak Monitoring System.

We've replaced Containment Air Coolers and a lot of the duct work and registers associated with that system.

We've enhanced the Decay Heat Valve Enclosure. There is a couple of valves that are low in the Containment Building that we need to ensure stay dry if there's an accident for some period of time. And we've essentially built a new enclosure around those components. And we just completed the final, final testing prior to Mode 4, and the leak rate was probably the best we've ever seen on that enclosure, so we feel good and confident about that modification.

We cleaned the Reactor Vessel. That was with fuel

out. And I believe back in the April timeframe, just as we were getting ready to put the fuel in, we noticed a couple, what looked like paint chips, and stuff. Went back, revacuumed, cleaned that all out prior to putting fuel in. So, we feel good about that.

We confirmed the Fuel Integrity. We ~~sift~~ sip all the fuel that's up on the fuel pins to see if there is any leakage on those assemblies and on the pins. We believe we have good fuel cladding integrity, and we also are pretty careful when we're putting those assemblies in to make sure we didn't have any grid strap which are there to help support the fuel pins, make sure those things behaved and we didn't grab any of those or tear any of those when we put the fuel back. So, we feel pretty good about our fuel integrity.

Again, we will not be using nuclear fuel and heat for this first Normal Operating Test, but the fuel is in the vessel, and it's, it's there.

MR. THOMAS: Mark, before you move on. You've had some challenges with the -- (mike squealed) -- with the microphone. No, with the fuel integrity over several cycles, past cycles. What's been done differently going forward to, to maybe prevent that in the future?

MR. BEZILLA: Okay. Lew said he

would like to answer that, Scott.

MR. THOMAS: Or to prevent similar challenges going forward.

MR. MYERS: We inspected all the fuel; fuel assembly by fuel assembly. We checked all the grid straps and we reconstituted with some stainless steel rods some of the, some of the fuel that's in position where you have, I call it jet impingement, vibration inducement. So, we reconstituted that through the fuel assemblies that area.

So, going forward from a Framatone standpoint, we've made all the, who supplies our fuel, we made all the improvements that they suggested.

MR. THOMAS: Okay.

MR. BEZILLA: You okay with that, Scott?

MR. THOMAS: Okay.

MR. BEZILLA: Okay. Boric Acid, we've scoured the plant inside Containment, outside Containment. We did the 50 pound and 250 pound test, so we feel pretty good heading into this Normal Operating Test as far as knowing what our baseline is and being able to detect any leaks, leakages at this point.

And then, finally, I've already talked a little about Containment Building, but we've cleaned the

Containment Building and I've had my Ops guys and RP guys and Services guys essentially in there nonstop for the last couple weeks just making sure they've looked at every nook and cranny and got just about everything out of there that shouldn't be in there. So, we're feeling pretty good about the Containment condition as far as this first Normal Operating Test.

Next slide, please.

Dave had talked about the, getting the specimens that were required out of the old Davis-Besse head. This is just a picture of it on the train. As Dave said, we shipped that off to Envirocare in Utah and it will be disposed of properly.

Next slide.

This is just a, a roll up of the actions completed. So, since the spring of 2002, these are the things that we've done.

We've done approximately a hundred modifications to the plant. Again, some of which we needed to do, some of which we've chosen to do to improve safety margin of the plant, the reliability of equipment.

We processed through about 7700 work orders.

We've written over 14,000 Condition Reports, issues, problems, questions. We've completed about 23,000 Corrective Actions in response to those questions, issues,

and problems.

We've performed over 15,000 surveillances. About 5,000 of those are shift routine types, so there has been about 10,000 other surveillances that we performed on our equipment and systems.

And we've made, we've performed about 2200 Preventative Maintenance Tasks to help ensure the reliability of our equipment.

And we processed about 2700 Procedure Changes trying to make that tool as good as it can be for our people to enable them to be successful in their tasks and evolutions.

So, what's the point? The point is we've done a lot of stuff. We think we've improved the reliability of the plant. We think we've improved and we've gained the safety margin of the plant. And I believe we set the stage for a successful Normal Operating Pressure Test here in the next couple of days. Okay.

Next slide, please.

So, what follows this Normal Operating Pressure Test? Well, we'll complete the test. And as Lew said, that's a 7-day evolution. The whole thing should take, say, 9 to 11 days, 9 to 10 days to complete heatup, pressurization, stabilization, testing, and the cooldown depressurization.

And when we're done with that test, we'll return to Mode 5, that's less than 200 degrees; and react, check on margin, and we'll assess the results.

We know we have to remove and modify our high pressure injection pumps. Jim will give you a little update of where we're at there.

Rick and Steve as well as our own assessments will determine how our people and how our processes performed. And I suspect they're going to be things, actions we need to do there. As much as I would expect us to be flawless, I know that's not going to be the case and we will have improvements to make. So, we will address the people, plant, and process issues.

We're already in the transition from the Return to Service Plan Practices to Normal Operating Practices. Prior to restart, we'll need to be there fully engaged doing our normal practices.

And then lastly, when we got our hands around all that, we will be asking for permission to restart the Davis-Besse facility.

That's all I have. Any questions for me?

MR. PASSEHL: Yeah, just a question from me. How do you plan to capture people, plant, and process issues identified and evaluate those?

MR. BEZILLA: Dave, that's a

good question. We have assessment monitoring processes, observations that we use. And then if we find any deficiencies there, in almost all cases we'll write a Condition Report and that gets us into our Corrective Action Process. What that allows us to do is deal with that specific issue.

And then one of the things that we haven't done a lot of during this time frame is trending. And by putting that stuff in our Corrective Action Process, that will enable us to look at low level items and see if there is anything we need to roll up where we need to take action where we don't have an issue or event.

That's one of the areas I think you may hear Rick or Steve talk about as training. We know we need to reinvigorate that. We're in the process of doing that.

But to answer your question, we'll put those into our Corrective Action Process and deal with them appropriately.

Other questions?

MR. GROBE: I have one or two things. First off, regarding the Decay Heat Valve Enclosure, I know that you had a number of challenges verifying the integrity of leak tightness of that enclosure. Could you describe what was the final cause of the leakage that you were seeing and how you resolved that?

MR. BEZILLA: It will be my pleasure, Jack. I have become up close and personal with this thing. Okay.

What we essentially had was a pit. All right. In a pit, okay. What we did was, we turned it into a tank. So, we made a stainless steel enclosure inside this head. We had about, oh, shoot, miles, we had miles of weld that we had to perform on this enclosure to build this enclosure.

Those earlier attempts at solving the leakage problems, we had to go back and do some touch-up on those welds. You do that much welding, you have some veracity there. So, we went back and touched up those welds.

Then our final challenge was there was penetrations that go into this enclosure, the actual piping penetrations. And the way we solved that issue was we made a boot, put a flange on the tank and made a boot; had that boot come up outside the enclosure; welded that tank, welded that boot to the tank; and then we put about 18 inches of fire retardant, foam-type material on that; and then finally a protective cover over that whole enclosure.

And we finally went and had the test here a couple days ago. Like I said, we had the best results ever. We just kept after it. Made sure we had the welds all solid and good, and fixed this penetration issue. Like I say, probably the best results I've seen.

MR. GROBE: Thanks, Mark. I did have some questions regarding Containment Air Coolers, but I peeked ahead and saw that Jim is going to be talking a little about those, so I'll hold those questions for you.

MR. BEZILLA: Understand the Containment Air Cooler questions you'll do after Jim's presentation. Okay. Very good.

MR. RULAND: Mark, could you tell me a little bit more about the cameras that will be under the insulation?

MR. BEZILLA: Bill, they're not under the insulation, they're down underneath the vessel. To get to our vessel, there is a ladder, you go down a ladder, go down some steps alongside the heat cores.

When you get underneath there, you look up at about 9; 8, 9, 10 feet, okay, 8, 9, 10 feet, you have insulation package. The cameras will be pointed at those, at the insulation package. So, we'll be able to look at that.

They're not, I don't believe they're inside the insulation. If I remember, they're looking at the insulation package. Okay?

MR. RULAND: Are those cameras going to be live outside Containment, do you know?

MR. BEZILLA: What we'll do is we'll, because we don't have like dedicated penetration

through the Containment for those, we'll have them all set up, we'll have the cable run out to a low, low heat area. In this case, I was going to say low doze, but in this case, it's just a cooler area. I believe we're setting it up right inside the personnel air lock. So, we can go in, it will go inside Containment and we'll be able to view it from right there by the personnel air lock.

MR. RULAND: Okay.

MR. BEZILLA: Any other questions?

MR. PASSEHL: I thought you were going to be a doing a bare metal inspection. Maybe I was mistaken.

MR. BEZILLA: Dave, like I said, I think we're going to take the heat. When we're hot, the thing is 532 degrees.

MR. PASSEHL: Right.

MR. BEZILLA: To pull the insulation off, it's pretty intense. I think we're going to take a peek.

Then, we know we have as found. We have pictures of the penetrations. We have, I'll say, as-left prior to this Normal Operating Pressure Test. When we're done, we'll pull the insulation off and we can get hands-on, check that out. So, we will do bare metal, but it's after the 7-day

hold test. Okay?

MR. PASSEHL: Thank you.

MR. BEZILLA: With that, I turn it over to Jim.

MR. POWERS: Okay. Thank you, Mark.

This afternoon I would like to demonstrate that the technical issues are coming to close here at the plant. As you know, we've described a number of the challenges that we've had and substantially improving that into safety margin at Davis-Besse. And we've made good progress.

As I think you can see from our closure curves over on the wall for the Corrective Action Program, we've worked through a lot of issues, and are largely crediting our Return to Service Plan we put in place last year.

We completed inspections. And can I have the next slide, please?

Completed inspections, identified and documented our issues in depth through our Corrective Action Program. As Mark alluded, we've answered over 14,000 Condition Reports in the course of this outage.

So, we have tackled many issues. At this point those issues are clearly understood and are bounded. Three of the major issues that remain are High Pressure Injection Pumps, the Electrical Distribution System, and Containment

Air Coolers. And I'll talk about each one of those.

First one I would like to go over is the High Pressure Injection Pumps. Qualification testing is now in progress at our laboratory in Alabama. As you know, we've done quite a bit of industry leading research on our High Pressure Injection Pumps and performance of Containment Emergency Sumps and the debris definition in Containment in post-accident environment. So, we're quite proud of that.

And much of the initial work that had been done to set up the progress we've made today is now set in place so that we're in the formal qualification stage of that. That means putting the actual parts that will constitute the final design into a proof test, which will be a 21-day test, and we're starting that test now, and it's ongoing.

We finalized our debris characterization. Of course, one of the big questions was just what kind of debris are we talking about; fibers from insulation, grit, pieces of, flakes of coating, paint that's in Containment, for example. Characterized all that and provided a basis for what the pumps would see for this 21-day test in that post-accident condition environment.

And we had a very comprehensive Design Review Meeting in Alexandria, Virginia, on August 28, 29, attended by not only our engineers, but contract specialist engineers, third party consultant reviewers for us to

assure the design is appropriate, our Engineering Assessment Board representatives, as well as the NRC in attendance to review it. So, a very comprehensive review was held of our final design plans.

We succeeded in getting the hydrostatic bearing design from Pump Guinard in France, who originated the hydrostatic bearing. And the French, as we mentioned in past meetings, part of their pumps and bearings for debris, potential debris and pumpage.

So, we took their design and adapted it and improved it for the Davis-Besse application. And the improvements being, the addition of screens that we've talked about in the water supply that goes to those bearings, as well as what we refer to as the escape groove in the bearing to allow any small debris that gets in there to escape.

That's been working very well in our testing environment, and we're pleased with the evolution of this design.

One of the other things we learned in our testing program is that we wanted the hardface, the fine clearance parts, that's wearings, bearing surfaces, for example. We've done that. We've worked those parts and they are available.

We're waiting for results of our qualification testing prior to doing final machining, particularly on the

hydrostatic bearing. So, that is awaiting the test results, but we're positioned to make those modifications to the pumps within the window after our Normal Operating Pressure Tests and that supports the schedule as we have it laid out. So, we're looking good from that perspective.

Then the last bullet talks about that, the modification schedule. So, we've reinstalled the original pumps to support the Normal Operating Pressure Test. They've done what we refer to as a surveillance test completed on those to demonstrate that they work appropriately at the plant; achieved the approval by the Nuclear Regulatory Commission on the license amendment request to support our testing.

Once we complete our Normal Operating Pressure Test, we'll remove the pumps, modify them, reinstall them, and proof test them, again surveillance test them to demonstrate they work properly installed at Davis-Besse.

So, that issue is coming to closure. We'll have substantial margin to the understanding of these pumps and the Emergency Containment Sump, plus help the environment for the industry.

MR. HOPKINS: Jim, have you decided on a final design, strainer design?

MR. POWERS: Yes, we selected a final design for the strainer. It's a 50 mil strainer

size, which we have seen perform well relative to the debris mix and in the long term; and we're observing that and testing that.

MR. HOPKINS: Is it any sort of special design of, the volcano design or anything like that?

MR. POWERS: It's a flat perforated plate design. We haven't hardfaced it because we found that pumping this amount of grit and debris through the pump and entering through the holes, that there was some wear, so we went to a hardened material design on that; otherwise, it's a flat perforated plate.

MR. HOPKINS: Okay, thank you.

MR. GROBE: Jim, I couldn't understand you; was that 1-5 mill or 5-0?

MR. POWERS: 5-0.

MR. GROBE: Good. Thank you.

MR. MYERS: Do you have any other questions? We have an expert in the audience.

MR. POWERS: Our expert.

MR. GROBE: Were you ready to go on?

MR. POWERS: Yes.

MR. GROBE: Before you do that, I just want to make a couple observations.

We had engineers down in Alabama observing some of the testing of these pumps and also we had an engineer and an engineering manager from our Nuclear Reactor Regulation Office in Rockville visit MPR and Associates, the engineering firm that's doing this work; and so far we haven't identified any questions. So, that's good news.

MR. POWERS: Um-hmm.

MR. RULAND: Jim, so, I know you said you were doing the 21-day proof test, I think is your word. So, based on when it started, is it 21 days from today or?

MR. POWERS: Essentially, yes, Bill, 21 days from today. What we'll do is modify that test, and determine the results. We're also going to go through our Normal Operating Pressure Test at the plant, determine the results of that. Determine what type of work we need to do, maintenance work, after the Normal Operating Pressure Test to finalize the outage. We can make a decision either waiting through the 21 days for the final determination of bearing design or take a, make a decision earlier in time.

We believe once we've operated for a substantial amount of time, bearing design will be proven and complete out the 21 days qualification, we can decide later.

Okay. With that I'll move into our Electrical

Distribution System. We've certainly talked about this over the past several meetings as well. This was a conversion that we've done in the analytical software that predicts how the electricity is distributed through the plant to all the safety-related and nonsafety-related systems and shows the voltage is adequate.

We've completed the ETAP analysis, that's the electrical analysis program, for the first Mode 4. Then, as well as defining Corrective Actions that will be required to restart the plant. And those are well understood and relatively straightforward.

For example, we have actuators on several of our dampers for H-Vac systems at the plant. That voltage for those actuators needs to be improved, and we are looking at changing the power supply cables to those actuators by pulling a larger size cable through the conduit to the actuator.

Very straightforward modification has been scoped out, proceeding down that track now. And I would say that characterizes the handful of things that we need to do after the Normal Operating Pressure Test to fully restore the electrical system, and improve its margin.

Another big step forward, we believe, in the margin of safety at the plant is the much improved understanding of design basis of the Electrical Distribution System and

correcting the problems that have been in that system over the years, what we have referred to as latent issues, bringing it up to industry standards.

So, following the Normal Operating Pressure Test, we'll make those modifications that we've identified, and provide resolution, final resolution prior to restart of the plant.

The changes that we've made to support this initial entry into Mode 4 and Mode 3, I'm sure we have substantial margin available in the system pending making those final modifications; and that is, like, we increase voltage settings on some of the transformers. We are also ensuring that all of the main transformers, power supply feeds are available, so we have plenty of equipment, plenty of margin going into the testing sequence.

MR. GROBE: Jim, could you briefly describe the modifications that are necessary for the second Mode 4 and 3, and also whether or not you've identified a license amendment request that would need to be evaluated?

MR. POWERS: We do not believe any license amendment will be required. In previous meetings, since we were looking at various options of approach to resolve our issues with the system, there were some of those that could have involved license amendment.

The one that we selected does not. Maintains the, all flexabilities that we have in the system as originally licensed by the Nuclear Regulatory Commission. And the modifications were required to essentially restore the capability involving the components, essentially, the existing overall configuration.

But the modifications consist of things like pulling a larger cable to hydro actuators for H-VAC dampers. There's also three fans in ventilation system, looks like we'll be pulling cable to those as well. And there were several other areas where we needed to complete more detailed analysis and manufacture input to us to fully understand the needs of our equipment. And that's being completed. So, they're not very complex modifications.

MR. GROBE: What's the status of the design change documentation for those modifications?

MR. POWERS: That is getting started at this point, Jack. We've done, one of our engineering, architect engineer has done a review of the scope of that and laid it out for us and we're proceeding forward at this point.

We've been focused pretty intensely on our electrical system entering into Mode 4 and make sure our work is complete there. Now, we're turning our attention on this follow-up for finding resolution.

I'll move on to the Containment Air Coolers. This is, this is also a major piece of work that we did at the plant restoring our Containment Air Coolers. We've talked about that item at past meetings, essentially rebuilt them.

What happened though during the loss of offsite power event on August 14th, we had what appears to be a water pressure surge in the service water supply to those Containment Air Coolers. And the reason for that, what happened is when the power is lost to the site from the grid, of course, the equipment stops, all the motors stop, and that includes the service water pumps which were pumping water through the, to the CACs and through the CACs that were in service.

So, when that pump motor stops, pressure drops off in the very high spots of the system, voids can be created. So, when the pumps restart, what happens is the emergency diesel generators start the sequence on low start repower, the service water pumps restart, and water rushes back through the system and refills.

When that happened during the loss of offsite power, one of our Containment Air Coolers, number one, indicated some deformation of flexible metal bellows that we have as part of the piping system connected to the Containment Air Cooler; and those bellows were there as part of the pipe

stress analysis and support design criteria to assure that the nozzle loadings on those Containment Air Coolers were appropriate.

Now, what we did is, after observing the misalignment and expansion of the piping bellows assembly, especially deformation of them, we issued a Significant Condition Adverse to Quality and assembled an Investigation Team.

This is a pretty broadly based Investigation Team. We have an Engineering Root Cause Mentor, as well as representatives from the engineering company that designed the piping system for CAC, and the bellows manufacturer provided us a representative who was on site for virtually two weeks full time helping us assess this. Water analysts were evaluating the, the pressure surge in the piping system by running computer programs. And we had pipe stress analysts from the Design Engineering Section, system engineers from our plant, Engineering Section, on the team as well. So, it was pretty broadly based composite team evaluating it.

What we determined looking into it, was that because of the nature of the outage that we were in, maintenance ongoing, Number One Containment Air Cooler was bound out of service while he were completing work on an air-operated valve, part of our air-operated valve project, improvement

project, associated with that Containment Air Cooler. And that was on one train of the Service Water System.

The other train we had the operable, operating Containment Air Cooler in it, there was water flowing through it.

When the pumps restarted, the pump that pressurized the train with the Containment Air Cooler from the one that's isolated, resulted in the pressure surge because of the closed valve in that train, with the maintenance alignment there.

When there is a closed valve and water pressure would reflect off, it can essentially double the pressures in a system. And similar at home, if you close a water faucet too fast, you hear a bang. That's the type of event that we're talking about.

And so, the other operating Containment Air Cooler unit sustained that loss of offsite power event very well. We had some questions as we examined the details of the bellows installation and looked at exactly what we had there for configuration; and we had some, we have some issues with that, that we feel we want to correct prior to return to service, after this, following this pressure test pending.

But CACs number 2 and 3 that were in the operating mode sustained the event rather well. In fact, all the,

all the piping system, pressure integrity was maintained.

Also, the team determined that we had designed this system for a water flow, pressure surges. The NRC had previously issued an Information Notice, 9606 is the number of it, that talks about post-accident conditions in these Containment Air Coolers that could lead to steam voids inside of that because of very hot conditions in Containment in the early stages of an accident. And then when the water flow is reinitiated, what happens with the steam.

So, we designed for those loads and, but the loading from the loop, what we found was, the loading from the loop was very similar to those loads, but when you have a Containment Air Cooler isolated, no flow going through it, and with a set of conditions in the service water system, set of conditions we had with relatively high pressure in the system, we could have a much larger load.

So, the Containment Air Coolers were normally operable in Modes 1, 2, and 3. We're in Mode 5. And, we learned quite a bit from this, in terms of how we're going to lay out our CACs that are in standby, how the system is designed to perform when it's in operation, one CAC in each group.

We determined thus far from our examination that the analysis that was done for Information Notice 9606,

pressures do apparently bound the loss of offsite power condition pressures in the inoperable loops. And that was good news. But, if you have an isolated CAC, has those conditions, those pressures can be twice, twice what have been analyzed.

MR. GROBE: Jim, you mentioned that there were other conditions that were in the Service Water System that might have been exacerbated the situation, can you go into that in a little more detail?

MR. POWERS: Yes, normally, a system like a Service Water System is, has flow rates that are based on temperatures of the season, heat loads in the plant, it provides normal heat exchangers. So, whether -- depending on the season with the lake temperature, how cold is your cooling water; depending on the operation of the plant, how much heat are you trying to remove from your systems; depends on how much flow is going.

And on the day that the incident occurred, there was not much heat going to the plant, of course, because we've been offline shutdown for a year and a half.

So, the pressure with the alignment of the heat exchange system was relatively high. It was over, a little over a hundred PSI. Normally, normal operation, we would expect it to be more around the range of 70 PSI. In fact, that's what the original analyses were based on.

So, we learned from this, that there was an additional amount of pressure, about 30 PSI, that needed to add to the analysis to get a full bounding assessment of potential pressures.

MR. GROBE: This is really an interesting issue. I'm not sure if you've gotten far enough along in your event investigation team work to completely answer this question.

What would prevent these kinds of situations from occurring during normal operation? Are you permitted to take one CAC out of service during normal operation?

MR. POWERS: Yes, during normal operation, we have three CAC units, and you're required to have two. We are required to have two in service, and that's one on each train.

So, during normal operation, you have flow paths open on each train. That's very important those flow paths are open. So, when the pumps restart, the flow can proceed through the CACs and pressure waves are relatively low.

So, the bottom line is, in Modes 1, 2 and 3 when the CACs are required to be operable, they've aligned them such that the pressure waves are not so high.

MR. GROBE: But do your technical specifications permit you to go down to one CAC for a period of time?

MR. POWERS: Yeah, Mark has said, for a limited amount of time, 72 hours.

MR. GROBE: Are there any operating restrictions that prevent pressure from getting higher in the Service Water System?

MR. POWERS: What we're doing is, basically we're providing analysis, we're revising our calculations, Jack, to be sure we encompass that condition.

And I should go on and add, we've done the assessment for the short term, and taken actions for the entry into Mode 4, done a full structural assessment of bellows and piping system, very detailed walkdown, finite element analysis of the bellows in their as-found conditions for CACs 2 and 3.

Also, had an independent third party bellows expert, if you will, somebody who's participated in the Expansion Joint Manufacturers Association Standards Boards, take a look at the situation for us from a third party perspective and be sure we have good margin for entry to Mode 4. And we do, providing operability evaluation of that effect.

But the long term actions will be taken. We'll add further margin in the system as well, not only revising the calculations to encompass this; system pressure could be higher, we are also looking at things like providing tie

rods on the bellows to further provide structural margin there.

So, there is a number of things we're looking at right now to improve the margins.

~~MR. GROBE~~ [Unknown]: Even the one we had out of service, that took the 2X water hammer when it was out of service. It still has margin left even after the water hammer. It's the form, bellows deform, there is still margin there, and structurally sound.

MR. THOMAS: Sir, are you saying that you could put CAC 1 back in service and call it operable in its present condition? Is that what you just said?

MR. POWERS: Yeah, we possibly could be able to do that, based on the analysis that we've done today, Scott. (mike adjustment)

What I said is, based on the analysis we've done today, that could be possible. We've examined it, because we want as much margin as possible in the plant as we proceed to Mode 4. And so, examined, was there a possibility, what was the actual condition of the CAC number one bellows.

And the stress analyst will tell you from a plastic deformation standpoint with a straining criteria on the material, has the capability of a 30 percent strain. We

believe that CAC number 1, there is about a 10 percent strain has occurred, based on that two times water surge we were talking about. CACs 2 and 3 were at about 5 percent.

So, there is still margin available. And these bellows, for those of you, perhaps a good description of them would be like a radiator hose made out of metal. So, they are kind of like an accordion.

So, what we're evaluating here is something that's designed to move and looking at whether it's in its design specifications and what we refer to as ASME Code, which is the piping pressure code, design code requirements that we are licensed under.

MR. MYERS: We don't have an intention to declare it operable, but we do have an intention to declare it functional, so we have additional margin, so we're trying to get as much margin as we can.

So, I asked them to go back and analyze those valves also, and they indicated to me there is margin there.

MR. THOMAS: So, let me understand. You're saying that CAC 1 will be available for service during the Mode 4 test?

MR. MYERS: Yeah.

MR. POWERS: We're evaluating.

MR. THOMAS: Okay.

MR. POWERS: Scott, that's

based on preliminary calculations that have been done up to about noon time today. That's preliminarily results of stress analysis calculations. So, there is further work to do. There is also the air-operated valve associated with that CAC also has work remaining on it, but I think Lew had a good point here in terms of would it be available to us should we want to utilize it as a backup.

MR. THOMAS: Where is that evaluation documented?

MR. POWERS: It's currently in preparation. As I said, preliminary calculations. So, we will head down the track of operability evaluation with that to formalize it, if all the analysis supports that.

MR. GROBE: Does your design basis earthquake analysis include a loss of offsite power?

MR. POWERS: I believe so, Jack, but I would want to reserve and go back to be sure.

MR. GROBE: I believe it does too. So, in the stress analyses that you did, did you for these bounding calculations, did you include design basis earthquake concurrently with the offsite power and pressure surge?

MR. POWERS: I believe we included the combinations that would be appropriate for the license basis, Jack. I have to go back, I want to go back

to verify that to the level of detail I don't have today, but I believe so.

MR. GROBE: Okay, as far as the long term actions that are being finalized, you haven't finally determined what actions you need to take; is that correct?

MR. POWERS: That's right.

MR. GROBE: As far as design activities, those have to be determined yet?

MR. POWERS: That's right. We have a design team looking at that now, at options, at materials availability, which is valves, and that type of equipment; and looking at what the, the most appropriate way to go about it is.

MR. GROBE: Okay.

Any questions?

MR. THOMAS: Is your intention to put the leak valves back on the CACs?

MR. POWERS: Right now, yes. We're looking at that. That's been a question we've had, Scott.

The CACs in the past years at the plant, there was a question about thermal, what's referred to, again, pressure design code is thermal overprotective pressure protection. If you close valves on a vessel filled with water and it

heats up, pressure will, like a pressure cooker, which has a relief valve.

There has been various special systems that they've done in the past that had resulted in the removal of small relief valves from these Containment Air Coolers, and with actions being taken to assure that they would not overpressurize. We're reevaluating that now, and heading down the track of putting some of those reliefs back in.

MR. MYERS: Yes.

MR. POWERS: Yes.

MR. THOMAS: Prior to startup? Is this a prior to startup action?

MR. POWERS: Currently, that's what we're talking.

MR. THOMAS: Okay.

MR. RULAND: Jim, I would like to bring you back to the, the HPI pumps. If you remember, we had some discussion about whether -- (mike problem)

We have been having some discussion in the past about having a public meeting with the HPI pumps. Sounds like now, like, you know, you want to start possibly planning a public meeting to kind of flush out, not only for our benefit but the public, exactly where you're at; and given that your design is not complete, and sounds like

your debris is finalized, it appears that this might be, you should go forward and start planning meetings. So, we'll be having further discussions on that matter.

MR. POWERS: That would be good.

MR. GROBE: That meeting will most likely occur in our headquarters office.

MR. POWERS: Okay.

Okay, if there is no more questions on the closure of technical issues, I would like to turn it over to Rick Dame, who will talk about our Operational Readiness Assessment Program.

MR. PASSEHL: Jim, before we move on, we covered about half of the agenda. Let's take a ten minute break until 20 minutes to 4, and rejoin. I notice Rolland Lickus, our State Government Officer is here, so he must have brought those monthly reports with him. So, go ahead and pick one up if you like.

Thank you.

(Off the record.)

MR. PASSEHL: Okay, we're ready to get started. Go ahead, Rick.

MR. DAME: Thank you.

My name is Rick Dame and I would like to talk a little about the two roles I was brought up to the

Davis-Besse facility to help out with. I'm from the Perry Nuclear Power Plant and the first role that I talked about last month was assistance with planning the Integrated Restart Test Plan.

Now, my background at the Perry Plant was a former Senior Reactor Operator and I had put together the shutdown and startup sequences for the Perry Plant for a couple of ~~refilling~~ refueling outages. So, I brought that knowledge to the Davis-Besse Station and it helped them put together a very comprehensive plan called the Integrated Restart Test Plan. Now, this plan is a detailed evolution all the way from initial Mode 4 to a hundred percent power.

We talked earlier about the 7-day Normal Operating Pressure Test. That's a big segment of this particular test sequence. And this plan covers the structure, expectations, assignments, and detailed schedule, contingencies that will be put in place to support the safe and event-free startup of the Davis-Besse plant.

And this particular document for the sake of the panel will be included as part of our revision to the Implementation Action Plan, which was Checklist Item 5.d.i. So, we'll be revising that. This is sort of up and beyond what you already have seen in that plan. Again, it's an extremely detailed and comprehensive test plan.

One additional note, we talked about some of the

work that's been done at this facility; all post-maintenance testing captured in this particular document, as designated down to the owner by night shift to day shift depending on the disciplines, and those have been published and have been distributed to the organization and folks are walking down those activities, so they're well prepared to handle those tests when they come up.

So, that was the first role that I was brought out, and, as Lew mentioned, this was approved earlier today. So, this plan is in place.

Now, I get an opportunity to move to the second role, which is a little bit different and I would say maybe a little more challenging. That's to take a look at Operational Readiness in the Davis-Besse Nuclear Facility. So, I'm here to talk about the Operational Readiness Assessment Plan.

Next slide.

The desired outcome of this assessment is to demonstrate the readiness of the people and processes to safely and reliably operate the plant.

We have heard through the different presentations over the months the amount of time and effort that has gone into improving processes, trying to change attitudes, trying to improve culture of the station with regards to nuclear safety. So, what this Operational Readiness Plan

is going to do is more or less take a step back and see how effective we have been at those particular measures.

Next slide, please.

There is a couple ways you can do assessments; you can test people; you can put forth surveys; you can interview people, but probably the most effective way of assessing the behavior of an organization is through observations. So, that's the method that we're going to be utilizing for the Operational Readiness Assessment Plan.

So, we're going to conduct observations and assessments during the 7-day Normal Operating Pressure Test. This is a very, very unique opportunity, because it's a complex task. It's going to involve a lot of operation evolutions, a lot of post maintenance testing, potentially a lot of decision-making if emergent issues come up. So, this is going to be a very, very unique forum to assess the organization.

We're going to perform potentially some exercises, depending on the amount of activities that are going on at the facility. I'll talk about these a little bit later, but we've put some together to take a look at standards and processes to ensure appropriate, safe and reliable operation. Again, we'll talk about this a little bit later.

One thing before we move from this slide, I'm here

talking about the assessment plan. It's not just myself doing an assessment. You'll see that we have a very, very comprehensive team that's going to be brought in to assess the organization on various levels. I think you'll find it a very unique structure and it's going to be very, very beneficial to the Davis-Besse station.

Next slide.

The Assessment Criteria. Any time that you're doing an assessment, you're going to want to evaluate against standards. The Davis-Besse station has a couple of standards they use internally specific to the operation of the power plant. One, is they have a Conduct of Excellence handbook.

What this is, is a handbook that's been passed out to the entire Operations Organization. It's issued by the Operations Manager, and it more or less communicates his expectations with regard to the operation of the facility. That also works hand in hand with the procedure called Conduct of Operations.

Besides those two criteria, again looking back at some of my past experiences, I was a host peer at the Perry Nuclear Power Station for a World Association of Nuclear Operator Assessment. The World Association of Nuclear Operators utilized performance objectives and criteria. They're very similar to another organization that's

domestic to the U.S., the Institute of Nuclear Power Operations.

So, next slide, please.

Let's talk a little about the World Association of Nuclear Operators Performance Criteria. This group is a worldwide group. They look at nuclear operation, domestically, and across the world. What they've done is they've assembled a set of consistent standards of excellence to determine station strengths and weaknesses.

For this particular assessment, we're going to select a couple portions of this. It's really a comprehensive book of different criteria, but we're going to focus on "Operational Effectiveness" and "Operations."

Now, for those not familiar with the criteria, what the particular criteria might look like under Organizational Effectiveness is there is a number of different things that would be looked at. One type of example would be, how much the management staff challenges each other when they look at different situations.

For example, if Dave were to come up to me with a Condition Report, which is one of the ways we document issues; it gets issued; it ends up the next morning getting evaluated by the management team. How much interaction is there and challenging, healthy challenging amongst the team to assure that an effective decision is made. So, this is

some of the types of things we'll look at.

We'll look at also how operators take a look at equipment. Do they recognize normal trends? What they do when they see abnormal trends? Is it documented? How effective is it documented? What measures are taken? Again, testing a questioning attitude, a lot of the thought processes with regards to nuclear safety culture and operation of station.

Next slide, please.

MR. GROBE: Rick, I have a question before you go on.

MR. DAME: Yes?

MR. GROBE: Are the weight of performance indicators or performance criteria, are those publicly available?

MR. DAME: I believe they are. I'd have to verify that. The criteria we're using are the 1999 version, and I could get back to you with more information on that, Jack. I do know that the INPO, the new evaluation criteria, there is a lot of similarities with respect to the WANO criteria.

MR. GROBE: Okay, thank you.

MR. DAME: Let's talk about the Integrated Assessment Team. I mentioned that I'm certainly not working alone with regards to this

assessment. In fact, I'm very, very fortunate to have a very, very talented staff that's going to be assisting me with this assessment.

Really, you probably need to look at this Integrated Assessment on three levels. One, there is going to be a line assessment. Myself will be the leader of that particular assessment, and what we'll be looking at is different evolutions within the plant. Again, looking for conduct of Ops, if the behaviors in the field match the expectation of station management.

So, I'll be looking at that from one level. Let's call that the Internal FirstEnergy Nuclear Assessment, because in addition to myself, there will be support from our corporate office, folks from the Perry station, their Senior Reactor Operator Level, also from the Beaver Valley station. So, again, those are all FirstEnergy power stations, nuclear power stations, that will be working on that portion of the assessment.

We're fortunate enough to have a number of external operational assessors coming in. Most of these individuals are talented, visionary, change agent Senior Nuclear Executives that have helped turnarounds at other stations or improve station performance. This group will be taking a look at mostly the organizational effectiveness. They're going to lend their talents not only in observations, but

going to look for that talented group of people to provide recommendations.

For example, if they were in charge of facilities, things they would be thinking of doing to improve performance in certain areas. Again, it's a great opportunity. We have a whole week to more or less pick the brains of some of the industry's best with regards to running nuclear power stations. So, that will be the second group of assessors.

Lastly, I don't want to steal any thunder from Steve Loehlein, but we have Quality Assessment going on during the entire Normal Operating Pressure Tests. And I'll let Steve talk about that quite a bit more, but it's really the third level of assessment. Teams will be working in conjunction with each other to assess station performance, operational readiness during the 7-day Normal Operating Pressure Test.

We'll talk about the products here a little later. Again, if you look at the diagram, again, the middle portion is that line assessment that I talked about, some of the interaction with plant management, plant staff.

Okay, you see down at the bottom part the External Operation Assessment tying in along with the Quality Assessment. We'll talk about some of the products and deliverables that will be coming out of this particular

assessment.

Next slide, please.

Okay. As I mentioned, the 7-day Test provides a very, very unique gathering opportunity, as I put it on this slide. We'll be looking mostly at evolutions that are already in place and scheduled and activities tied directly with performance of Normal Operating Tests.

We talked about some of the processes and improvements. We'll be looking at a lot of things with regard to inspections, the way we're doing business there; again, some of the problem-solving of emerging issues. These are new processes that have been enhanced to help support the restart at the Davis-Besse facility.

Second bullet, we talk about organizational response to actual emergent issues. We're very proud of the document that we've sort of built upon industry experience; both problem-solving and decision-making procedure. When emergent issues come up, the management team can declare the use of this particular document; really, anyone can, to help systematically and rigorously work through issues to find the best solution and most effective solution. So, we'll be taking a look at how the station is utilizing that instruction.

Last, but not least, organizational response to emergent issue exercises. You heard Mark Bezilla talk

about earlier a lot of the different things we've worked on in the plant. We do expect some minor emergencies to come up. It's sort of the nature of starting up a power plant that's got thousand and thousands of components; however, if we're pleasantly surprised with day 3, 4, 5, 6 of this test, everything is running completely smooth and we haven't seen certain types of organizational response to issues, we'll have some exercises we can utilize and we'll talk about those on the next slide.

"Emergent Issues" Exercises. Again, these are more or less contingencies that we expect to see in a number of different observation opportunities that we'll take advantage of, but we do have some we put in place. I'll describe some of these in a little bit of detail as we walk through the things that we potentially look at.

The one thing, having been a Senior Reactor Operator at a nuclear power facility, I have utmost respect for the control room crews, especially in the middle of a complex evolution, to minimize distractions; and every measure will be taken to ensure that there will be no distractions to the control room crew, more or less moving them away from that sole mission or primary mission of safe event-free operation.

So, you might ask what kind of exercise would that be? Again, we would like to look at the cognitive thought

process of how people take a look at issues, look at their significance, and how they may react to them, again, in the spirit of nuclear safety culture.

Interestingly, we talked about 14,000 odd Condition Reports this year. Some of those may have looked innocuous on the surface, but once it got dug into proved to be pretty significant. We might just go back in that whole database, so to speak, and maybe utilize one of those to improve, see if some of the lessons learned applied from some of those Condition Reports have been retained and how they react to them. That might be one way to look at things.

There is other ones where we might bring up a Condition Report, and again, we bring it up, again, assessing the determinations made by the shift manager. There might be absolutely nothing wrong with this Condition Report, but we'll see if maybe they overreact or underreact.

Again, we want to take a look at the response and maybe the thinking aspect of the shift manager, but then, more importantly, we would like to see what happens once he does look out for help, because again, we're moving towards an operating facility. That's the mission of the entire station to support operations when issues come up.

Okay. So, we want to see how apt those shift

managers are to ask the organization for help. We don't want a shift manager particularly trying to solve all the issues they can. We have a whole lot of people around. They're very talented to support that operation staff. Again, it's got to be about operations leadership when you start talking about an operating facility. We need to make sure that organizational support is used accordingly.

Some of the types of cognizant-type exercises, maybe some of the things we would take a look at, mentioned Condition Reports, one aspect of those are Operability Determinations. What those are, is let's say, Bill were to find an issue out in the plant, writes a Condition Report, and it happens to be on a piece of equipment. That piece of equipment, probably very important to the operational staff; he'll take a look at it. One of first questions he'll ask himself; am I operable or not.

Okay. So, we may put some of those exercises in to exercise that thinking again. Not stuff that's obvious, stuff that requires some thinking to put together, ask some questions, I would like this looked into a little more.

Priority 200 Work Order. What those are, is an organizational response to a work issue or a problem that needs to be addressed on a 24/7 or around-the-clock basis. Really, we'll be looking at the organizational response, not necessarily what the control room is doing as they are

asking for that help. Okay.

Procedure changes. I know one of the things Lew Myers is always talking about is procedure changes. Let's take a look at some of our processes there, things we can do to get better. Again, it's an aspect of operating a power plant that is important.

Immediate investigation and off-hour equipment challenges. Things to take a look at. Again, when you look at off-hour challenges, something happens at 3 in the morning; I know at my station more often than not, I'll get a phone call, "Hey, Rick, what do you think about this?" So, we'll see if those kind of things are happening here with regard to decision-making and response to issues, again, weighing significance of issues.

Next slide, please.

MR. GROBE: Excuse me, Rick. I just had one quick question. You may have said this and I just didn't understand it. What exactly is a Priority 200 Work Order?

MR. DAME: The priorities at the station with regard to work orders, there is basically a tiered approach. Priority 100 is absolutely emergent. It would be something you have to do to protect the health and public safety by an issue. What that means, you would go out and basically fix it and some of the paperwork

sometimes would follow; for example, work order.

Priority 200 is something that needs to be responded to in a round-the-clock type of action. Might be something that puts you into, for example, a 7-day limiting condition of operation for tech specs. Okay. So, there is a, a desire to recover that piece of equipment and bring it back to its operational function to support operation of the facility.

A Priority 300 would be something that would be addressed ideally within a 21-day period of time.

And Priority 400 would be following your normal work schedule, which would be 12-week rolling average.

So, again, it's just a prioritization system.

MR. GROBE: Okay.

MR. MYERS: A tech spec change would be expected.

MR. PASSEHL: Rick, I have a question too. Your second bullet there says, "Exercises will be designed to have minimal impact on Control Room Crews." Yet, you have listed an example of exercise being, say, immediate investigation. I don't quite understand how those two match.

MR. DAME: Okay, unique investigation is actually done by the line organization outside the control room. So, what that would be is, for

example, one of the Condition Reports or certain criteria might be you want or need investigation done and that's usually a 24-hour response by Engineering Organization to an issue.

Again, one thing about these exercises, I talk about the utmost ~~expect~~ respect for the control room crew, none of these will be put into play without the consent of the entire Integrated Assessment Team. So, that would include not only the line staff, but the external staff.

So, again, I think we'll have plenty of opportunity to take a look at these, a sort of contingent if we're pleasantly surprised and the plant is operating flat out perfect throughout 7-day test. So, again, that was a desire to put together some exercises.

MR. MYERS: You know, running drills on shift is nothing new. We have fire drills, safety drills, we've been exercising for years on shift. So, you have to be cautious about it. We're sitting there, once we get the plant stablized, run the NOP, just sitting there; this is pretty routine, so being able to run some of these things.

What we have to do also, is simply being shut down, we have this whole support core around, working around all day and night, because then you have the team calls the facility man. We have to run these drills in a manner

where, or the exercises, so that we evaluate how it would be done if that support crew wasn't there. Because that's the next step when we ask to go restart the plant, right? You won't have that support, your support team there 24 hours a day, 7 days a week.

So, you know, do we have the right duty calls? Do we have the right procedures? One of the things that we use at our other plants is, in the middle of the night, we would call key members, we have a duty list. We get the team out there and utilize the organization to help the shift supervisor solve his problem. We all work 24/7 when you call on us.

How does this team respond? I haven't seen that, you know, so we need to look at that.

MR. THOMAS: Lew, I agree that testing is done on shift, but I would, I guess, question if it's normally done during an infrequently performed test evolution, which the NOP Test would be. And I guess our concern would be that, and likewise yours, I'm sure, that it didn't impact the control room's focus on the test itself. So, that's, I guess, what's driving our interest in this.

MR. MYERS: We considered, you know, the infrequently performed test and the evolution we're using for this. What that does is add additional

layers of management to monitor stuff like that.

MR. THOMAS: I understand.

MR. MYERS: You know, bringing the plant up, and heating it up and getting all the pumps running and everything, and testing your equipment once we get there is pretty tough, and cooling back down. Once we, for 7 days just sitting there, there will be several days there where it's pretty, pretty, just not much going on, so that's the time period we're looking at.

MR. THOMAS: All right.

MR. DAME: Again, Scott, I want to reemphasize, these are sort of contingent plans and activities and not all of them will be initiated. We want to again look at organizational effectiveness too. If an issue is happening, it's in Engineering, if it's in their house; are they addressing it with a matter of priority it measures, deserves, and bringing responses and solutions to Operations versus maybe Operations always calling out.

Again, we're trying to look how these organizations work together for operational readiness. We'll be very, very cautious. Again, it will be a group decision before we head out.

MR. MYERS: At our other two stations, we have clerical support on shift to help out with procedure changes. So, I don't see that right now.

So, how would it work here in the middle of the night? We need to understand.

MR. THOMAS: Okay.

MR. DAME: Okay, the last slide that I would like to talk to, is how we're going to document these assessments. This is a question that came up at the last 350 public meeting. And, there is actually a couple different vehicles that we can use to document the assessments.

My particular team, Internal Assessment Team, is going to use the FirstEnergy Nuclear Focus Self-Assessment Report document. A Report Number 2003-21, so, this will capture all the different operation from the Internal Assessment Team.

We also have a computerized data base which we can put observations on, and, again, we're going to sort of leave it up to the teams once we have our initial coordination meeting. It's going to happen probably tomorrow or the day after with regards to the vehicle we would like to use to document these observations.

The External Assessment Team as part of this plan. Again, this plan covers all three of these reports that we'll see here as deliverable documentation. They'll be supplying a report within 10 days to the President of FirstEnergy Nuclear.

That same 10-day due date, okay, is also applied to the Internal Assessment Team, as well as the Quality Assessment Team; and that's all part of this report here. So, again, I don't want to steal any of, steal any of Quality Assurance's discussion which is coming up next here, so they'll talk quite a bit about the assessment report, what they'll be looking at.

All these reports are going to be included in the final Integrated Restart Report. So, again, one of the Checklist items, I believe it's 5c, talks about Operational Readiness for Restart, a lot of these observations and assessments will be documentation, support documentation for them for the final Integrated Restart Report.

With that, I open the floor to questions.

MR. GROBE: Just one additional question or comment actually. If we could put slide 33 back up, three slides back, I appreciate it.

Thank you. I just wanted to make a couple observations about this plan. Engineers love drawings like these, love to have that up there.

The Quality Assurance Assessment is something that's required by NRC, and we're going to hear Steve's plans for what kind of assessments he's going to do. I think this overall plan is very well conceived. It will provide a very solid insight augmenting Quality Assurance for putting

people in at the experience, all quality people in at the working level, looking from the inside at what's going on; and if there isn't enough going on, you have this plan for exercise, which is something I haven't seen before. It will be interesting to see how it works.

In addition to that, you have this External Assessment with experts across the industry. I think this is a very solid plan and it will give you a lot of insight, and I look forward to our next meeting, hearing the results of what you learned.

MR. MYERS: I think, is Russ Carney here now?

MR. DAME: Yeah, Russ Carney the Operations Manager of the Perry station will be participating in this.

MR. MYERS: Is he here?

MR. DAME: He was here earlier.

Again, we're going to be getting the best and the brightest of the Operations Departments across First Nuclear to help out. Again, we'll be making observations, at the same time making recommendations, things that can be done to improve organizational effectiveness and Operations.

MR. MYERS: Okay. Steve.

MR. LOEHLEIN: Thank you.

While the rest of the organization has just finished up discussing all the progress they've made, all their plans for finishing preparations for plant restart; the QA, we have sort of a different role, it's our job to continue to assess their activities and assure that they continue to make improvement in areas where it's needed.

So, the focus of my discussion today will be really in three areas; first will be the Corrective Action Program, then I'll talk to you about some of the observations we've made recently in the last several weeks, and then at the end I want to discuss these activities that we have planned during the Normal Operating Pressure Test that has been mentioned earlier today.

So, this first slide here is an update on the Corrective Action Review that we spoke about in several previous meetings. I'll kind of remind everyone about what some of this data is.

The Quality Organization some months back led an investigation review of the Corrective Actions associated with quite a number of Condition Reports. We looked at it from the standpoint of Corrective Actions generated out of it. There were 5,402 completed Corrective Actions that we looked at, at the time, which include all of the 0350 Checklist related Corrective Actions.

That review team some weeks back concluded in ~~'92~~ 92 percent of those cases, there was an acceptable connection between the Corrective Actions that were taken and the records and documents that led back clearly to the condition described in the initial Condition Report.

In about 8 percent of the cases, the team concluded was inconclusive or unacceptable and they generated 37 Condition Reports as a result of; and those 37 Condition Reports documented 422 sort of discreet occurrences of issues they had questioned.

Since last month's tally, now as of the other day, it is, 221 of those 422 issues have been investigated. And the fallout of it is, 185 is proved to be documentation errors or inadequacies, which means that in those cases an appropriate action was taken in response to the condition, but the documentation that led from the initiation to the ultimate action that was taken needs to be improved.

There were 36 cases found so far, missed items or procedure errors. Of those 36, found to be dominated by two specific types of errors. We found 8 cases in which there were issues closed, assuming they would make a change to the Preventative Maintenance Task that would cover an ongoing action. So, in many cases that did not happen.

There were also about 15 cases so far, that issues that were expected to be in the Checklist for the walkdowns

to be done for the Mode 3 Pressure Test, QA found in these 15 cases, they were not on the checklist.

Sort of the conclusion of this thus far, is if you look at these cases, none of these has been a significant condition adverse to quality. They represent in a certain percentage of the cases only a small percentage of the cases some more minor items were missed, and they are being addressed.

Any questions on this review?

Next slide, please.

Because of the importance of the Corrective Action Program, I thought I would update you, Jack, and the rest of the team on some of the things we've been doing. I'm sure that your Residents know that we've been following the Corrective Action Program pretty closely. We do that every quarter as part of our Continuous Assessment Process. So, we get data on a regular basis. And, I want to share with you those things we are emphasizing to the organization in terms of requiring attention by management.

First, the, since last month we talked about transition and how the organization would be going into some of its more normal practices, back to their daily 8:00 Management Review Board Meetings with Condition Reports, so forth; given us a chance to observe the categorization process.

And, conclusions we have at this point is that the categorization process appears to be working properly to the procedure, but we believe that challenges by the organization of each other in that categorization has been, is being held up primarily by three or four key managers who are making the challenges, and that interchange needs to be more of the managers in a more active way. That's one of the things we provided to management as some insight.

Also seen some cases, they're not using all of the available barriers in reviewing these conditions. Sometimes a Condition Report analyst isn't used or a supervisor has been delegated to approve a Condition Report that normally would be a manager's signature. And while that's all okay, we have seen when we look at those examples, that more frequently that those additional barriers or management barriers are not used, we see that the quality of the evaluation tends to droop. So, we've been providing that insight as well.

Probably the overall most important thing that needs to happen, I think it's been mentioned here before, is this reinstitution of the trending effort. The whole Corrective Action Program as its devised right now is based on the concept that lower level issues will be treated and managed as low level without requiring a great deal of intervention

by management at high levels, not every issue is treated as an earth-shaking type of issue.

That's a good practice when you have a complex machine, like one of these units, and you have a lot of minor tasks, if you will, on the process, but what comes key with that, is that when you use trending to show, to tell yourself where are we seeing peak types of occurrences, and where does it then represent some more important challenge, something that may have a more important cause behind it, needs to be investigated.

The current status is that the performance improvement is reinstituting, reinstituting a trending process and their data, as I understand it from them, was collected up to the end of August, and the first report to the management of various departments on their part of the process will be out in September. So, this is being instituted, but we can not have QA pass any judgment on the quality as yet, because there hasn't been an outcome from that process yet.

It is critical that this, for the future health of this Corrective Action Program, that that be effectively implemented; and that's something we're going to continue to monitor.

Questions?

MR. MYERS: One of the

differences we found when we first came was that our other two plants, went through all the corrective CRs, every morning, and here you --

(mike problem)

MR. MYERS: The differences, we had the same Corrective Action Process being implemented here and at our other two plants. Our other two plants, we review them. Every night, we would write Condition Reports. And, the next day, we, as a management team would review those and properly classify them.

At this plant, we have been shoving it down to a subcommittee, those are being done managers -- by managers, so we lost that ownership. So, we raised that back into the management area. And, we need to continue to focus. I think we're classifying right, but I think he's right, we see three or four people challenging every one. We should go over all those CRs at the managers meeting.

MR. GROBE: Just one observation. We're going to be talking about this a lot more on October 1st when you talk about your status of your Safety Culture improvements and your long term vision for that. I've peeked ahead at some of the slides, you're going to be talking about some of these issues also.

I understand that you're going to have some monthly performance indicators that are going to give you insight

into the cultural performance of your organization, and we'll talk more about those on October 1st.

But I also view the trending program as very important. Trending programs I've seen implemented at various nuclear stations over the years have varying amounts of value added, but an effective training program can be a very good precursor indicator for evaluating Safety Culture attributes, whether they're procedural adherence issues or quality of technical documents or personal performance issues, things of that nature.

Prior to reinstituting the trending program, we did have some good feedback that were trends, coming from the nature of trends, but they were coming from individuals, not a structured trending program. The one that comes to my mind right now, is that the Engineering Administration Supervisor was seeing a trend of administrative errors in documentation packages that were coming to him or her. I don't remember the individual. And said, I've seen enough of this and I want you guys to get to the bottom of it, and wrote a CR on that trend.

That's the kind of thing that is really critically important, as I said, and provides a precursor to more significant issues.

So, he deserves or she deserves a pat on the back for identifying that trend, but you need to have a

structured program to continually evaluate what your Condition Reports are saying to you and whether there are any trends.

MR. MYERS: That's really interesting. We write about, on the average, we wrote about 15,000 Condition Reports. What, several thousand Condition Reports a year received at the station.

My belief, my personal belief, you know, I hate condition reporting systems. It's not part of the precondition reporting. I've been to a lot of plants where I find them, the subsystem. We pretty well eliminated that. We have one Corrective Action Program, and our procedures go through there, our engineering questions go through that program and properly classify stuff.

We also -- so then that gives us the ability to amend stuff and look at it, and really from a management team understand it.

A good example; one of our other plants, say that; we found a Corrective Action in the training program we didn't know about. Found we had like three or four thousand Corrective Actions we needed to take over there, that our management team at the plant didn't know about. So, we had to fix that.

So, if you know who is writing the information, the right information or data, not trending is not too good.

So, you got to make sure that's the case.

Additionally, not only can we do that, one of the things we typically did at our other plants, process called Collective Significance Reviews, I've mentioned here before. Once a quarter or two, we had at our other plants, our licensing group take a look at all of our corrected CRs and Corrective Actions that's in our database.

We also go back and look at other stuff, like INPO reports that we receive, NRC LERs that we are writing, industry experience that we're finding; and we try to put that all together as a senior leadership to figure out, do we have an overall site problem with procedure adherence, seek the limits of mechanical maintenance group or something.

So, what that helps us do is every year develop focus areas where we want to go with the plant, I would use the words, you use the words Safety Culture awhile ago. I don't think that if you find a negative trend that's necessarily procedure adherence, means you have a materially bad safety culture, but if you start eliminating all these barriers, you wind up with a bad safety culture. Remember the slide I showed last time? So, as we watch the barriers, you see negative trends on the barriers and we act on the trends, so you don't have failures in any of them.

So, the Collective Significance Process sort of does that. So, we have those two processes.

Once again, I've been over here at this plant for about a year and a half now and I've not seen how we really do business. I know the way we do business here is often the way it looks on surface to our other two stations, but when you go dig down, it's quite a difference.

So, we have a sense of that, make sure that we have consistency. As Chief Operating Officer, my job is real simple, make sure we have good standard implemented and we implement them at all three of our sites. That's exactly what I intend to do.

MR. LOEHLEIN: Okay. This next slide. This one covers some of the things we are doing more at the present time.

First of all, the ongoing oversight of qualification testing. That speaks to the high pressure injection pump related testing going on at the laboratories in Alabama. One of my assessors from the engineering side has been there several times in the past. He is there this week. I will be going there myself tomorrow morning to spend a day looking at how that is progressing.

Some of the other focus areas, I've listed the key ones, kind of areas that we're looking at to provide you with some of the things we've identified through the

organization.

One would be, we've talked about Containment Air Coolers today, the valves that we're dealing with on Containment Air Cooler Number 1.

There was a case that response to the loss of offsite power, that QA thought pretty well performed by the station, but we felt the identification of this particular problem should have been more timely, took longer to identify than it should have.

The area of procedure compliance I know is one of significant interest to the NRC, as well as to us. In our second quarter assessment of the organization, we found some data, there might be something to the issue of procedure compliance, I would say, but now we're starting to get some data and issues we find that may start to point to what some of the causes might be for the problems that we've had in the area. All, what constitutes work to procedure as opposed to working to the skills that you've been trained to do.

Just as an example, we had this week seen a Senior Reactor Operator from Beaver Valley who is on rotational assignment to Quality Assessment at Beaver, came up this week to spend a few days with us, observing testing activities and so forth.

And he observed some of the service water testing

that was going on in his summary assessment. The observation was that the operators performed very well. He felt when he compared it to what was done at his station; that the procedures lack quite a bit of guidance in some areas and the operators were more reliant on their own historical knowledge than they would have been at his station.

And we've seen some other cases in which the operation staff or the maintenance staff is operating under the assumption that they, this is within their task capability.

So, we think now we're starting to put together some insights that will help us investigate further where there may be some improvements. There may be not just in performance, but maybe in understanding better what you need a procedure for and what you don't. And that all goes back to training and so forth.

So, we want you to know we are starting to get some data along those lines, Jack, you asked me about that some time back.

I think -- there are a number of other activities I could talk about, unless you have questions, I'd probably prefer to move on to the Normal Operating Pressure Test activities that we have planned.

Sort of as a way of context, we have a nice little

map, you pointed out on the slide 33, Jack. It shows how we're all working, how we have these roles associated with Normal Operating Pressure Test.

Some of the things that QA is going to be looking at there, as it relates specifically to that part, is we're going to be looking at, here's some of the specific things. Verifying four hours after reaching normal operating pressure that there is a Mode 3 walkdown to ensure technical leakage is accomplished. That's one of the things that's required by the process. We'll be looking at that.

We're going to be observing the Reactor Coolant System Inspection Team. We'll be accompanying those teams in the Containment on those walkdowns.

We'll be observing the work order, procedure process, corrective action activities of the two 7-person maintenance teams that will respond to whatever they're given.

We'll be verifying the proper institution of the RCS leakage procedure, and a number of other things. That's specific to the actual Mode 4 activities.

Throughout these evolutions though, we are observing a control room manned control, and a number of other activities that involve coordination with the control room and personnel out in the field.

Part of the context I would like to give to this is that we're not in QA just doing support of or oversight of this Normal Operating Pressure Test. The whole Restart Test Plan has been under development for ~~sometime~~ some time, and QA has done oversight of the development of that plan. We have provided insights into that.

And we are engaged in assessments throughout this Continuous Assessment Process, that includes running up to Mode 4 and 3 and coming back down to Mode 5, and along with that, lots of support activity, Just-In-Time Training. And anybody that's familiar with our Continuous Assessment Process knows other support things that we look at.

Probably what I would like to share with you, all this is going to go on in the next few weeks, we'll share this same importance with the line organization in the last few days. We're particularly interested, not just in the process and how the equipment performs, but in three key areas that relate all the way back to what the organization needs to learn on the reactor head event. The Operations leadership that we displayed, the proper demand and control and guarding of the safety of the plant; the safety culture, which we'll be able to observe well through how promptly issues are identified and whether they're prioritized and resolved appropriately and what condition they are. And we'll be looking at procedure compliance,

which was another key ingredient. So, those are kind of the big picture things that we'll be looking for on top of the others.

I would say, finally, the one thing that we get to do that maybe others don't get to do as easily, we'll be observing line organizations oversight for how well they do oversight. So, that will be interesting for us.

Any questions?

MR. GROBE: Nope. Thank you.

MR. MYERS: I would like to take a couple moments and try to talk about some of the changes we take into the improvements to Anchor the Long-Term Permanent Improvements that we have at FENOC.

Next slide.

Since the last time we met, there has been many changes made within FENOC to sustain safety focus and improve performance at our nuclear stations. At our corporate level, Gary Leidich has now been named President of FENOC. And I think that happened since our last meeting.

We have Staff Improvement Executive, gentleman by the name of Joe Hagan, that reports on the 22nd of September, and Senior Vice President of Engineering and Support to replace Gary.

Joe comes to us from the Excelon Corporation. So, you may know Joe. At that company, he was Senior Vice-President, Nuclear Operations-PECO. I knew Joe as the Site VP with Entergy, where he was the Site VP of the Grand Gulf Nuclear Plant. So, we're really pleased to have Joe come to us, and in this position.

And once again, the other thing that he runs, since shutdown has gone on besides improved our executives, also in charge of our Quality Oversight Group as Vice President. He not only reports to the President of FENOC, he reports to our Board of Directors also, our new Committee Board.

At the plant level, we've installed an experience Senior Leadership Team since the shutdown, and we'll be announcing a new member in the near future. Randy Fast, the previous Plant Manager, Jack, I think you know this, is being moved to the corporate position to ensure the organizational effectiveness for all of our plants.

The Safety Culture issues and Organizational Effectiveness, it's got to the point now that we want to take Lessons Learned from here and focus on all of our plants. And, Randy will be primarily responsible for consistency and looking at our Safety Cultures and Safety Conscious Work Environment, as well as our training programs at our facilities. There is a lot of ground to be

made at our facilities, you know, consistent training program, consistent with all three facilities. So, Randy will be focusing in that area.

The plant senior leadership team now, which is the directors and vice president at Davis-Besse Plant is looking, has over 150 years of nuclear experience. It's a pretty good senior leadership.

Nonetheless, there's 13 managers at the plant now, and they form a management team. That's been a significant strength since the outage. And that team has over 260 years of nuclear experience.

Another 15 managers, 18 managers as directors that we have in place now, over 15 of those people have either Senior Reactor Operators or Senior Reactor Operator certification. I think one of the major things that you look at, at the decline of this plant, was that we had done a good job in the past of developing the top line of managers, gain SRO and SRO certification, and that went from an SRO pipeline down to a certification, and over time to nothing at all, you know, so we think we've regained that level of operation of experience that we need at the station. And we'll really be focusing on the SRO pipeline in the future.

From improvements to improve safety margin, many improvements have been made that have added safety margin

to the Davis-Besse plant. We talked about several of those today. A couple come to mind. We think the Containment Sump that we've installed sets a new industry standard. That's the most robust PWR sump I've seen. We brought some of our experience over from our Perry Plant to develop that. So we think, that's another example of how the fleet approach is serving us well.

The new reactor safety seal that we installed will greatly improve, reduce the dose I think we receive each outage, and also our exposure of the reactor vessel. The leakage that we saw, when we inspected it, now corrected. So, we think that is a good improvement to our plant.

The FLUS Monitoring System is the first of a kind to be installed in the United States. You know, people say what they want; when you go out and inspect RCS every outage and do all whatever you want to do, but there is nothing there, that we got the only system that I know of that's live time one hundred percent of the time that will tell you if you develop a leak. So, that's, that's going to be a very unique piece of equipment.

I'm really excited about testing it during this 7-day test. Probably one of the ones I'm watching the most.

The Electrical Transit and Analysis Program we installed, we talked about earlier, called ETAP, allows us,

it really is an interesting piece of software. With Jim, I characterize it, as most plants use, when this plant was built, used software, when the plant was built, it didn't have software, but it went to a type of software that allowed us to look at electrical distribution as a whole.

Our electrical distribution system has always been robust, but with the new software we're able to run transcients; you ask about our switchover, we can make any kind of assumption you want to make. We can make breakers out, equipment out, different pieces out, and run different transients to see what the voltage does and the currents do down, down the component level. It actually takes into consideration the wiring and connectors.

So, we think this piece of software that was installed at our plant is not only helping us analyze our electrical distribution better, but it's also causing us to make some modifications to our system. Jim talked about several, that there is some more that we'll be making after the outage. We're going to look at some of the electrical the MCC motor control centers that we have daisy chain at our plant. So, we'll be making improvements there.

So, from a modification standpoint, there has been unique things done at our plant we think that will make this plant an industry lead when it's all said and done.

From a FENOC standpoint, we've also changed our

vision at our plant, in all our plants, to try to focus on safety more. And we also developed new matrix that we think will be an industry lead. Our vision used to be operational excellence. That was pretty good, but it really didn't send some of the messages we think we want to send. So, we've changed our vision to all our plants to be people with a strong safety focus, delivering top fleet operative performance.

The new matrix now monitors Safety Culture. I think that you go look at our, our corporate performance indicators and matrix, I don't know of anyone else that's going to have a routine matrix monitoring Safety Culture and Assessment Program where every couple years they assess Safety Culture of the plant. We built that into our program now. I certainly believe that will make us unique to the industry.

We've taken several actions. I think they're long term improvements to the Personnel Performance. Next slide.

From a training standpoint, we've trained everyone on Lessons Learned. And I've talked about that before, won't go through everything here.

We've got new training for the managers and supervisor that focus on supervisors focusing now on nuclear safety and professionalism, nuclear

professionalism.

There is improvement in our evaluation process. We now have two new areas that we evaluate on, the managers and supervisor under, but what I think is more interesting and really not here, I want to talk about is, Jack, I think you attended our ROP meeting, and observed that for part of this week. We're getting ready to roll out a new tool called Root Learning Map that will be used as what I would call an alignment tool for each and every one of our employees.

You know, I find this tool quite, one of the more exciting things that I've seen. They did a demonstration where the, myself, and the, and the senior leadership team on Saturday, and they used this product, with a cola company project. And we were so interested in, the senior leadership team before it was over with, we were ready to go up to the nuclear power and get a cola. So, it was -- maybe we need to do that.

But anyway, we thought that was, that's really a good product, and we're excited about using it in our plant. So, we've worked with this company for several weeks now on the senior level and manager level to develop this product. It's important that each employee understands the unique responsibilities that we have as a company, for we have to the nuclear industry, and most

1 importantly, the responsibilities that we have to the
2 public.
3 You know, this tool is designed to make sure that
4 there is clear alignment in those areas. We will provide
5 this alignment training to each and every employee at our
6 plant before startup.
7 Next area. One of our major Building Blocks was
8 the Program Building Blocks, was to ensure that our
9 programs have good ownership, meet industry standards, and
10 give us assurance of good implementation.
11 We made progress with our Corrective Action Program,
12 but we're just getting started. We have a long ways to go
13 there. That was evident yesterday.
14 We've already contracted with an independent
15 contractor, independent review of our design calculations
16 program with Sargent & Lundy starting next week. So, that
17 would continue to improve the quality of our products. You
18 know, when I got through with the, even before that, there
19 is a couple of areas that comes to mind. Engineering
20 calculations are one of them. Make sure that's a good
21 product. So, we're going after that already.
22 We've already started a project to upgrade our
23 engineering design basis, with a new tool called ATLAS. I
24 had it available today. I was hoping to get some time when
25 you guys were at the plant to demonstrate that tool, but we

ran out of time today and got away, so maybe the next time you're there, we'll be able to give you a demonstration of that product.

It is a computerized product that allows, that I can even use, to go in, and you give me an accident, I'll tell you the systems with that product that you have to depend on, the components that you have to depend on, and then it allows me to go to curator and pick up the design basis for each and every component.

So, very quickly, you have access to design information at our station. So, I think this is a tremendous tool that we implemented at our Perry Plant. We already have the products in place to implement it here.

Next slide.

We also made great improvements I think in our Oversight Process, our Management Observation Program.

Mark talked earlier, one of the main tools we used in the 7-day Test is the Management Observation Program, besides the Corrective Action Program. Each and every activity, we already have a detailed schedules of managers to be on shift to observe activities using our Management Observation Program.

New performance indicators are visible at each and every department. You walk around the site, even on the walls, what we think, that we expect each and every

employee in that department to understand. So, we've got these new performance indicators in place.

The Safety Culture Assessment, we think is not only a good improvement, we think our process is probably, and it's our opinion, the best in the industry. And we've looked at all of them.

The Engineering Assessment Board was put in place to ensure quality of our engineering mods. And there's probably some other areas we can use that in.

Then augmented independence and capability of our Quality Assurance Group, I think has given us great dividends. I look back at some of the Quality Assurance reports that are written at our Davis-Besse station; and read the reports, I find them quite good. I just can't come up with the same conclusions that the Quality Assurance group did. So, we think this independence will help us to be self-critical.

And then improvements in the Nuclear Review Board of our company and borrowed oversight has really been strengthened.

That's all I have in that area. Any questions?

MR. GROBE: Just an observation. I think that's a good bit of information to wet your whistle on, on what we're going to be covering October 1st.

MR. MYERS: Right.
MR. GROBE: Because that's the foundation of what you've done.
MR. MYERS: Right.
MR. GROBE: Did you have some closing remarks you wanted to make?
MR. MYERS: Yes, I did.
MR. GROBE: Okay.
MR. MYERS: You know, in summary, I started out today discussing loss of offsite power. All of our technical support centers were manned at all three of our plants. We supplied the resources to each other. At Beaver Valley we had food delivered to the Perry Plant. So, those technical support centers were all communications, demonstrating the effectiveness of our fleet approach that we now have, that our three plants are not being, not being operated in isolation anymore.

Once again, we're confident enough that once we were confident in the stability of our grid, we determined together at our Perry Plant and our Davis-Besse plant, and went back to offsite power at 1940 on August the 15th.

What I'm most pleased with, is throughout that transit, when I'm talking to, talking to Canada and in talking to Bill Pearce, I think our team consistently focused on nuclear safety throughout. Every conversation

we had was focused on nuclear safety.

Employees responded both in a timely and effective manner, which is a good sign, the response to our facility. And finally, our equipment, our equipment consists of redundant trains. That means we have two redundant trains that are one hundred percent capable of handling an event, and they all operated well.

You know, nuclear guys really like redundant trains. And they like that redundancy. One of the things I've seen up here with Mark is, he's the only person I ever seen bring two laser beams with him for presentation.

MR. GROBE: Do they both have batteries?

MR. MYERS: Yeah.

We now, we're now I think at a major milestone at our plant. We've entered our Restart Test Plan. We've tested our Containment. Demonstrated the leak tightness of that area to the public. We performed the 50 pound, 250 pound test, and fixed the problems that we found in that test.

We're now, we're now at 210 pounds, with a bubble in the pressurizer in our reactor. And we've already ran the 2-1 and 2-2 reactor coolant pumps. We ran all four since we've been here, all four reactor coolant pumps today, and I think we're raw testing now as we sit here, testing our

main control rods.

That's really important. We put the new head on the reactor, but we have not stroked the control rods to make sure they move properly with this new head since we've been shut down. So, stroking these control rods is really important to us. So, that's an exciting milestone there.

MR. THOMAS: Lew, could you just for clarity sake, could you be a little more specific with the control rod testing, what's going on, just what exactly you're doing?

MR. MYERS: Oh. The control rods are operated from the reactor head, the control mechanism on the reactor head. What we're doing is, we're proving the rods will move freely without interference, and that the new reactor head is properly aligned to the control rods in the reactor core. So, ensuring those rods will move freely in our reactor core is very important.

We're doing that today cold. So, taking like one bank of rods at a time and moving them, making sure they move freely. Does that answer your question?

MR. GROBE: I appreciate Scott's question. I think it's important to note that in the current operational condition they're in, there is two ways to control reactivity; one is with the control rods and the other is with boric acid that you add to the

reactor coolant.

In the shutdown condition you're in, you can actually pull all of the control rods out of reactor and the boric acid that's in the coolant will still maintain the reactor to properly shut down.

So, people get sometimes a little "hinky" when you start talking about pulling control rods, but in this configuration, control rod testing is --

MR. MYERS: We're simply doing rod testing.

MR. GROBE: -- a completely safe activity.

MR. MYERS: And with that, once again, our Boron upgrade at 2300 would be in rods, which is quite shut down, so we were simply doing rods.

We ran all four of our reactor coolant pumps once again, and beginning to increase reactor pressure the next day up to 2155 pounds of temperature, about 532 degrees, by the operation of reactor coolant pumps.

I guess that's sort of hard to understand too, but generally as you start the reactor coolant pumps, and reactor coolant pumps are large machines that circulate about a hundred thousand gallons each of reactor coolant through the core. When you run the reactor coolant pump, you have about 16 megawatts thermal of heat, and so it's

easy to heat up the reactor just by running the pumps.

So, we'll be running all four reactor coolant pumps with a bubble in the pressurizers, normal way with a steam bubble, normal way we operate, to increase temperature up to 532 degrees and the pressure up to 2155 pounds, which is our normal conditions.

So, we're doing that today. We're doing that to show the integrity of our Reactor Coolant System and our systems. And that is an exciting time.

Most of our technical issues, as Jim said, are complete. We still have a couple out in front of us. We have some electrical changes we want to make and high pressure injection pumps that we're working on, and we have the parts and solution for that. And so we're excited about that.

We're performing the 7-day Test using the Lessons Learned from other extended outages. I mean, you look -- Jack, you've been through some of these. We expect to find and fix any equipment problems with the issues resulting from the extended outage, many of them during this test. So, we would expect that our power ~~extension~~ ascension program when we do restart the plant will be smooth. And we would not find some of the problems I think some of the plants had that were in extended outages. So, I'm excited about this 7-day test and the technical issues getting behind us.

We'll assess our people during this, during this 7-day process, our plant and how it operates; and then finally, our processes. And once we're satisfied that we've -- and we don't expect this to be clean. We expect to find more problems and go fix them. And once we assess everything, and made the Corrective Actions, we'll write a report with those Corrective Actions and present that report as part of our Restart Test Plan to the, to the Restart Oversight Panel.

Shortly after that, we would expect to, with their approval and with Gary Leidich's approval to come forth to the regulatory agency and tell you that we're ready to restart our plant and ask your permission to do that.

So, this is a very exciting time and a major milestone for us. As we sit here today, Mark and I keep getting beeps, pages about the status of the equipment as it's changing before us.

So, a very good opportunity for us, and we look forward to it. We think this is a major milestone in our plant. That's all we have. Thank you.

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

I just want to make a couple of observations. One of the current buzz words in business management vernacular is having an organization built to last. Clearly, the

meeting that we're going to have on October 1st, and the focus of that meeting is going to be not only what you've done to-date to prepare for restart within the context of Organizational Effectiveness and Human Performance, but also what your structured plans are to ensure that that continues on and how that would be monitored in the future.

The panel is charged not only in evaluating the activities that you conduct during a shutdown in making recommendations to Jim Caldwell and Jim Dyer and Bill Travers on whether or not we think the plant is ready to restart at an appropriate time, but also to express the view as to why it has confidence that this plant can start safely and operate in the future safely.

So, the meeting on October 1st is a very important meeting and it will provide additional insight beyond Management/Human Performance Inspection Team activities into that aspect of the activity, Return to Service Activity, that is ensuring that the organization is built to last.

If you get to the point in time where you restart the plant, not only restarted safely, but it will continue to operate safely in the future.

So, that's an important meeting. And we mentioned a couple other meetings that we're anticipating in the next

several weeks. One would be discussion of the results of the Corrective Action Team Inspection, and the System Health Inspection. That will be likely in Region III.

In addition, we're expecting in the next several weeks to have a meeting on the high pressure injection pump redesign and testing activities, and that will be in Rockville.

Then, I think we have a public meeting, our next monthly meeting, if I look at my monthly newsletter, which you can all pick up now in the foyer. But our next public meeting is October 7th at 2:00 and again at 7:00; not in the Oak Harbor High School as indicated in the newsletter, but at the Camp Perry, at the Camp Perry facility which we have been in before.

So, with that, I think the business portion of this meeting is adjourned, and we'll reconvene in about five minutes to discuss the, any questions and receive any comments that members of the public have.

I think it should be clearly noted on the record that this meeting adjourned the business portion at 1 minute to 5, and that is a record. I appreciate that. Thank you.

(Off the record.)

MR. GROBE: What I would like to do is first, if there is any representative of the

local level -- excuse me, local elected official here that has a question or comment, I would like to give them a chance to ask it, or if they have a statement, I would like to give them an opportunity.

I don't see anyone. I'll just open it up for general, general questions or comments.

MR. RIDZON: Paul Ridzon, McDonald Investments.

On your website today, you indicated that you plan to issue a final report on the NOP Test about 30 days after conclusion of the test. Will this be the first feedback you give, or will there be a preliminary report? And, secondly, is issuance of this report a precursor to restart?

MR. GROBE: I think you can interpret every one of our inspection reports as something that is before restart, but I don't believe it's proper to interpret the completion of the NOP Test as moments away from restart. I believe that FirstEnergy has publicly said that they anticipate restart during the fourth quarter of this year. The NOP test is an opportunity to discover problems, and to demonstrate that the facility is in a leak-tight condition.

As Lew Meyers indicated earlier, and Mark Bezilla also said this, they anticipate finding some problems. It

is not unusual in this kind of situation to find minor leaks on valve packings and bolted connections and things of that nature, which takes some time to complete. And they also went over a number of activities that need to be completed prior to restart, including the three that Jim Powers highlighted today; high pressure injection pumps, the Electrical Distribution System and the Containment Air Coolers.

So, there is some work that was not necessary to complete prior to the Mode 4, Mode 3 pressure test that is necessary to complete prior to Mode 2, and those activities will be ongoing.

With respect to public dialogue on the NOP Test results, I anticipate that will be a significant agenda item on our next public meeting, which I think I said was October 7th. So, that will pre, that will occur before the inspection report is issued on our inspection of the test, so I anticipate significant dialogue at that time.

MR. RIDZON: Thank you.

MS. RICK: Hi, I'm Shelly Rick with Ohio Citizens Action; with me is Carrie Kree. We are bringing 984 letters today that are written by people across Northern Ohio to Jim Caldwell urging that the Davis-Besse plant be kept closed.

These people are not convinced that the technical

fixes that are being made to the plant are sufficient to warrant returning it to service. So we're asking not only that you deliver the letters to Mr. Caldwell, but also that you weigh very carefully the points that are made by the residents of Northern Ohio.

MR. GROBE: I appreciate -- you could leave the box down there, we'll pick it up. You don't need to bring it up here. I appreciate receiving these letters.

We have a new item in the last few months in our, in our monthly update, our newsletter, which is called, I think it's called Mail Bag or Mail Call. It's called Mail Call. And we've received over five thousand letters from folks as far west I believe as Oklahoma and as far east as New York State, many letters from people who reside in the State of Ohio.

And, I believe all of those letters have been read. I've read a significant number of them. Jim has read a significant number of them also. And we're in the process of responding to every one of those letters, and we'll also read these letters and respond to them.

I wish these people would have the opportunity to come to one of these meetings or spend more time reviewing material that's publicly available on the website, as many of the questions they address are already available

publicly, but we appreciate getting the letters. We'll respond to every one of them. And thank you for bringing them to our attention.

Is there anyone else that has a question?

Yes, sir?

MR. KHAR: My name is Ashar Khar, with Foresight Investments.

MR. PASSEHL: Would you please spell it?

MR. KHAR: I just want to ask, there is no way for us on site to get any kind of report during the test period, you know, the 7 days and all that, just after that, which would indicate whether there was some, something unusual that happened or not, or did not happen. I mean, I know you guys will be monitoring it on a daily basis. So, there is no way that you'll get any kind of news relating to whether everything went, within the normal sphere of stuff, or something abnormal happened, earlier than, I guess, the October meeting or the report.

Can we expect in some part of your public relations side, if there is something unusual it might come out with something earlier than that?

MR. GROBE: There is, I think I understood your question. There is a punch line from a very old joke; no news is good news. But, if anything

significant arises during the course of this test, there are reporting requirements that are in place that the NRC has, that significant issues would need to be, very significant issues would need to be promptly reported and less significant issues would have a longer time frame on reporting to us.

But, I believe that there will be information available if there is a significant problem. So, I don't think you need to worry about that. And I just want to emphasize, that I anticipate that the results of that test will be discussed in detail at our next public meeting. And, this is not a short test. I believe it's going to be ten or twelve or fourteen days if everything goes well, before the test is completed. And that's well towards the next meeting. So, I think that will be a good opportunity to conduct the test, evaluate the results, and I think FirstEnergy will be prepared to discuss it at that meeting.

MR. KHAR: So, if I can just paraphrase it --

MR. GROBE: Could you speak up, sir?

MR. KHAR: Yeah. You said it will take about ten to fourteen days, starting say, today's is the 10th, the 24th of September, if everything works by

schedule, we would hope to have the test completed. So, if we don't hear anything from the NRC, as you indicated, during that time frame until we come in October, it identifies nothing of any substance happened which required, you know, you to report a major occurrence to headquarters or anything like that.

MR. GROBE: I would certainly encourage you to contact FirstEnergy. I believe if, that they would be more than willing to discuss the progress they're making at any time. So, contact FirstEnergy.

MR. KHAR: Okay. Thank you.

MR. BROOK: Hi, I'm Shawn Brook with HSBC Securities. I just had two quick questions, to actually amplify what my other two financial industry colleagues asked. First was, is there some, were the test to be somehow halted, the important three day period, when there is specifically high temperature and pressure, would there have to be some issue of public safety that would cause the test to be somehow interrupted?

MR. GROBE: I missed the very last words, the test would be somehow what, sir?

MR. BROOK: Well, the test, there's something wrong going to happen, supposed to last between nine and eleven days; there is apparently from the discussions today, a three-day period where there is very

high pressure and very high temperature. If the test were to be halted for any specific reason, would it have to be for public safety or for one of these potential problems that have been identified?

MR. GROBE: That's a very good question. I appreciate the question. Let me make a little bit of a clarifying statement and then answer your question.

There is going to be a period of time that it takes to raise the Reactor Coolant System temperature and pressure up to the normal operating pressure, and normal no load temperature. Then the, that pressure and temperature will be held for 7-days. And then after the 7-days, the plant will be cooled back down to Mode 5.

During that period of time, this is a, from a public health and safety standpoint, this is a very low risk evolution. And, it's for that reason that the Restart Panel concluded that there were only four of our checklist items that were necessary to close prior to this first Mode 4, and the rest of the checklist items are required to be addressed prior to restart of the plant.

Those four checklist items were making sure the Containment sump was properly, the modification to the Containment sump was properly modified and properly designed and installed; that the Containment Integrated

Leak Rate Test was effectively conducted; that the Reactor Coolant System Leakage Monitoring Program, that the company has made significant improvements and provisions, was in place and adequate; and that the Boric Acid Corrosion Management Program that's been upgraded during the shutdown has been properly implemented and is adequate.

So, those four checklist items have been inspected and closed up. And as far as the agency is concerned, the, no further activities need to be accomplished by us prior to restart.

Again, the reason for that, there is very little risk. There is essentially no decay heat in the fuel, and so once the reactor coolant pumps, there is no heat source. So, if there is any significant problem with the Reactor Coolant System, it's very easy to immediately ameliorate that problem.

If there is a significant problem, obviously, the test would be suspended, and I don't anticipate that. Certainly, FirstEnergy is going to have a lot of people paying close attention to that as is the NRC.

I anticipate that there will be a series of work items that come out of this test, as the results are evaluated, and those would be worked off. But I believe, as far as work that's currently known, the critical path work is the work that we heard Jim Powers discuss today,

and that's the high pressure injection pumps, the Electrical Distribution System and the Containment Air Coolers.

MR. BROOK: It's only the responsibility of FirstEnergy to report --

MR. GROBE: Get a little closer to the microphone.

MR. BROOK: I'm sorry. It's only the responsibility of FirstEnergy to make those reports to inform people that we have those problems, or?

MR. GROBE: Well, it's the responsibility of FirstEnergy to document problems in their Condition Reporting System as part of their Corrective Action Program. The NRC has regulations for certain more significant Condition Reports that they're required to be reported to the NRC.

At a normally operating plant, there is likely to be several thousand Condition Reports every year and just a few would be required to be reported, just to give you some context to the level of significance of the things that need to be reported as drastically, the routine day-to-day kind of issues that are dealt with.

Any work items that come out of this would be handled through the Work Management System at FirstEnergy. So, it's their responsibility to identify issues, document

them in the Corrective Action Program, fix them through their Work Management Process.

And we'll have people inspecting this program. We have the three Resident Inspectors, as well as an Operations expert from the regional office and Senior Metallurgist from the regional office who will be on the site.

MR. BROOK: Thank you. One last question, if I might. You mentioned something, or someone on the panel mentioned there is going to be a Restart Inspection Team assembled in anticipation of FirstEnergy coming to you to request a restart. My point is, has that team already been assembled and what do you think the advance notice would be, like, are we talking a week, two weeks or a month before the, the team actually receives a request from FirstEnergy to restart the plant? I'm trying to get an idea of the timeline.

MR. GROBE: There is a lot of interest today in schedules and timeframes. The schedule for the restart, what we call the Restart Assessment Team Inspection, affectionately referred to as the RATI. That schedule is not driven by anything FirstEnergy asks for. That inspection will be conducted when we believe that they're sufficiently far along in having a routine operating organization that we can get a good assessment,

independent assessment.

The team has not been assembled, because depending on when the inspection occurs, the team will have different membership, because all these people are not sitting around in Chicago waiting for something to do; they all have different work activities. So, we'll put together a group of appropriate experts at the time that it's time to conduct that inspection.

There is no close relationship necessarily to the Restart Assessment Team Inspection and the restart meeting that Lew Myers referred to; or the restart decision, other than the fact that the inspection needs to be completed prior to the panel considering a restart recommendation. It should not be inferred when that inspection starts, we're one week away from restart or anything of that nature. That's not the way it works.

MR. BROOK: Thank you.

MR. GROBE: Any additional questions?

Okay, very good. Thank you very much. We'll reconvene at 7:00.

(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 21st day of September, 2003.

Marie B. Fresch, RMR

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