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

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

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PANEL MEMBERS PRESENT:

U. S. NUCLEAR REGULATORY COMMISSION

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

FIRST ENERGY NUCLEAR OPERATING COMPANY

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

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

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

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

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

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

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

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

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

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

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

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

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

I would like to start off with introductions on our

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

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

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

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

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

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

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

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

We also have Jay Collins, he is a General Engineer

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

Our transcriber today is Marie Fresch from Norwalk, Ohio.

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

MR. KOEBEL: Carl Koebel, Ottawa County Commissioner.

MS. LIPA: Welcome, Carl.

MR. PAPCIN John Papcin, Ottawa County Commissioner.

MS. LIPA: Okay, welcome.

MR. ARNDT: Steve Arndt, County Commissioner.

MS LIPA: Okay, thanks, Steve.

MR. WITT: Jere Witt, County Administrator.

MS. LIPA: Hi, Jere.

Okay, thank you.

Lew, would you like to introduce your staff?

MR. MYERS: Yes, thank you.

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

President of FENOC.

Gary Leidich is also here, is Acting Vice President.

And we have Kitty, Kathryn Dindo here with us. She's one of our corporate officers of DB and FirstEnergy. Kathy is out there.

At our table today, we have Mike Stevens. He's the manager of, the Director of our Maintenance Group.

Bill Pearce, V P of Oversight.

Clark Price is sitting next to me. Clark is going to brief you on the 350 process some.

Neil Morrison. Neil Morrison is on loan with us from our Beaver Valley Plant and he's taking care of our Program Reviews.

Jim Powers, the Director of our, Director of Engineering is with us.

And finally, Randy Fast is down at the end of the table and Randy will be talking on some of our Containment Health.

MS. LIPA: Okay, thank you.

MR. MYERS: Also, Bob Schrauder is with us. I'm sorry. I sort of missed that one.

MR. PEARCE: Welcome, Bob.

MS. LIPA: Okay, next we'll

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

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

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

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

MR. HOPKINS: Thank you, Christine.

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

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

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

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

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

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

The next item last month was Design Issues

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

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

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

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

weeks.

MS. LIPA: Okay, thank you Jon.

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

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

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

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

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

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

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

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

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

Effectiveness and Human Performance. That one will be continuing.

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

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

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

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

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

MR. MYERS: Okay, thank you.

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

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

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

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

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

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

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

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

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

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

Corrective Action Program Report, we completed on

12-5.

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

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

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

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

fruitful.

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

MR. MYERS: Right.

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

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

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

MR. MYERS: You know, one of

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

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

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

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

was an excellent meeting.

MR. GROBE: Okay, very good. Thank you.

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

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

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

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

I would like to talk for a moment about the

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MR. STEVENS: If I could add to that.

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

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

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

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

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

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

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

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

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

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

We wrote that up in one of our observations, and

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

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

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

This month?

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

MR. MYERS: Can you explain that?

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

MS. LIPA: Thank you.

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

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

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

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

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

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

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

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

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

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

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

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

MR. ROSS: I'm Mike Ross.

Yes, in the Operations Group, we benchmarked three different facilities with a six-man team. We have a number of activities in the Operations area designed to be totally involved and move forward in the future and sustain performance. I can go through a list.

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

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

My name is Mike Roder by the way.

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

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

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

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

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

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

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

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

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

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

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

MR. DEAN: Okay, thanks, Mike.

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

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

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

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

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

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

MR. DEAN: That would be great.

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

MR. STEVENS: Thanks, Lew.

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

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

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

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

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

Our reactor coolant pumps; we took two of the

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

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

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

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

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

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

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

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

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

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

MR. DEAN: I wanted to ask a

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

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

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

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

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

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

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

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

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

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

MR. DEAN: Okay.

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

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

Emergency sump strainer. We're replacing that

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

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

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

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

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

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

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

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

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

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

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

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

I'm sorry.

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

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

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

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

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

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

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

I talked about the reactor coolant pumps and the

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

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

Next slide.

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

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

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

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

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

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

MR. POWERS: Yes, I will.

MS. LIPA: Okay, thank you.

MR. STEVENS: Thanks.

Next slide.

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

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

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

(off the record.)

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

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

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

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

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

MR. GROBE: Thanks, Jay.

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

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

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

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

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

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

MR. MYERS: Okay?

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

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

Thank you, Mike.

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

The results of those inspections. 511 condition

reports were initiated by the inspection program.

941 of those were directly related to the boric acid extent of condition. Now out of those items, no significant material conditions existed, other than really I think the most significant component or system that was impacted were the containment air coolers. And the containment air coolers is a ventilation system that distributes air throughout containment, and so there was degradation of that system.

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

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

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

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

Next slide, please.

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

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

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

MR. CHAMBERS: Randy, those

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

MR. FAST: Thank you, Jim. Is that clear?

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

MR. FAST: That's correct.

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

MR. FAST: That's correct.

MR. GROBE: Okay.

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

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

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

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

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