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3 PUBLIC MEETING
BETWEEN U.S. NUCLEAR REGULATORY COMMISSION O350 PANEL
4 AND FIRST ENERGY NUCLEAR OPERATING COMPANY
OAK HARBOR, OHIO
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Meeting held on Tuesday, April 15, 2003, at
7 2:00 p.m. at the Camp Perry Clubhouse, Oak Harbor, Ohio,
taken by me, Marie B. Fresch, Registered Merit Reporter,
8 and Notary Public in and for the State of Ohio.

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10 PANEL MEMBERS PRESENT:

11 U. S. NUCLEAR REGULATORY COMMISSION

12 John "Jack" Grobe, Chair MC 0350 Panel
William Ruland, Vice Chair MC 0350 Panel,
13 Director of Directorate III NRR
Christine Lipa, Projects Branch Chief
14 Christopher Scott Thomas,
Senior Resident Inspector
15 U.S. NRC Office - Davis-Besse
Jon Hopkins, Project Manager Davis-Besse
16 Anthony Mendiola,
Section Chief PDIII-2, NRR
17
FIRST ENERGY NUCLEAR OPERATING COMPANY
18
Lew Myers, FENOC Chief Operating Officer
19 Robert W. Schrauder,
Director - Support Services
20 J. Randel Fast, Plant Manager
James J. Powers, III
21 Director - Nuclear Engineering
Michael J. Stevens,
22 Director - Nuclear Maintenance
L. William Pearce,
23 Vice President FENOC Oversight
Clark Price, Owner - Restart Action Plan
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MS. LIPA: Good afternoon. I would like to welcome everybody, FirstEnergy, and members of the public to this public meeting.

Folks sitting at the back, if you have trouble hearing, feel free to come on down a little bit closer.

This is a public meeting between the NRC's Davis-Besse Oversight Panel and the FirstEnergy Nuclear Operating Company. I'm Christine Lipa. I am the Branch Chief in Region III, who has responsibility for the NRC Inspection Program out here at Davis-Besse.

So, we'll go to the first slide, which is the purposes of the meeting. And, the purposes of this meeting are to allow the Licensee to present the status of the activities in the Restart Plan; and, secondly, to discuss the NRC Oversight Panel activities, and we want to focus on activities that the NRC has been doing since the last public meeting.

The next slide shows our agenda. And, first off, I would like to make the introductions. I'll start down at my far left is Jon Hopkins, and he's the NRR Project Manager for the Davis-Besse facility.

Next to Jon is Tony Mendiola, and he's the Section Chief in Projects in Headquarters.

Next to Tony is Bill Ruland and he's a new panel member. He replaces Bill Dean, who has been promoted and

1 moved on to another assignment in Headquarters. So, Bill
2 Ruland is a Senior Manager located in our Headquarters
3 Office in Rockville, Maryland. He's the new Vice Chairman
4 of the Oversight Panel. And, Bill's position is the
5 Project Director for the Project Directorate PD-3 in NRR,
6 which is all Region III plants.
7 Next to me is Jack Grobe, and he's Senior Manager in
8 the Region III Office in Lisle, Illinois. And he's the
9 Chairman of the Davis-Besse Oversight Panel.
10 On my right is Scott Thomas. He's the Senior
11 Resident Inspector, and he's located here at the
12 Davis-Besse facility.
13 Also, we have Doug Simpkins operating the power
14 point today, and he's the Resident Inspector. Currently,
15 filling the Resident Inspector role for us. Although he
16 has been reassigned to be the Hatch Senior Resident and
17 he'll be leaving for that in May.
18 We also had earlier greeting was Nancy Keller, our
19 Office Assistant.
20 And, also we have two new NRC employees in the
21 audience, Francis Ramirez and Carla Roke.
22 And, Lew, I would like to offer you the opportunity
23 to introduce your folks.
24 MR. MYERS: Thank you.
25 Good afternoon. We have a couple people from our

FirstEnergy Corporate Office with us. Leila Vespoli is with us. She's our Senior Vice President, Corporate Legal Counsel.

And, Maria Riley is with us today. She's FENOC Corporate Legal Counsel.

To my left is Bill Pearce. We talked about him on the agenda last time, VP of Quality Oversight.

Randy Fast is to my right. He's our Plant Manager.

Mike Stevens is the Outage Director and Maintenance Director. He's next to him.

Clark Price is the Manager of the 350 Process and Manager of Services. And, Clark will be giving us some of the performance indicators today.

Jim Powers, next to him, is the Director of Engineering at our site.

And, Bob Schrauder, next to him, is Director of Support, at the end of the table.

MS. LIPA: Okay. Thank you, Lew.

I would also like to offer public officials or representatives of public officials to introduce themselves?

MR. ARNDT: Steve Arndt, Ottawa County Commissioner.

MR. PAPCUN: John Papcun,

Ottawa County Commissioner.

MR. KOEBEL: Carl Koebel, Ottawa County Commissioner.

MS. LIPA: Okay, thank you.

Okay, this meeting is open to public observation, but I did want to remind everybody, this is a business meeting between the NRC and FirstEnergy. And 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, and then we'll also be available after the meeting.

In the foyer on the way in today, there were copies of our April edition of our monthly newsletter. It looks like this. And copies of the slides, both the NRC slides and FirstEnergy slides are available.

And, one thing I wanted to point out about the NRC monthly newsletters, is on the back page there is a block that has some contact information for you and some reference information, for the phone numbers of our public affairs folks, and the email addresses and also the Davis-Besse Web page.

Another thing that we had in the foyer was the public meeting feedback forms. And we've been using these to shape our meetings since we started using those feedback

1 forms. So, any feedback that you have, you can provide
2 it. It is important to us.
3 We're also having this meeting transcribed today by
4 Marie Fresch, and that will maintain a record of the
5 meeting. And transcription will be available on our Web
6 page usually in about 3 to 4 weeks. It's important that
7 the speakers use the microphones, so that the transcriber
8 and the audience can hear.
9 So, the next slide is a summary of our March 11
10 public meeting that was held here. We discussed the status
11 of ongoing plant and NRC activities. The NRC staff
12 discussed the status of several Restart Checklist items.
13 We describe the inspections that we've done and
14 those that are upcoming regarding the Adequacy of Safety
15 Significant Structure, Systems, and Components.
16 We also discussed the status of ongoing System
17 Health Review Inspections, which is primarily focused in
18 the engineering area.
19 We highlighted some inspection activities that
20 remain to be completed, including the Normal Operating
21 Pressure Test, the Containment Vessel Integrated Leak Rate
22 Test, the inspection of the emergency sump, inspections of
23 various Licensee programs, and the Adequacy of
24 Organizational Effectiveness in Human Performance.
25 Also at last month's meeting, FirstEnergy provided

updates in several areas, and I'll just list those briefly here. First, there was a status of milestones from both a hardware and management perspective. Second, there was an update on the work in the Safety Culture and Safety Conscious Work Environment areas. Third, an update on work on some of the Building Blocks, such as Containment Health, Restart Actions, and Program Compliance. And fourth, there was discussion about the Return to Service Schedule.

So, the next slide -- and I did want to mention that these transcripts will be available on our web page. I know we have one out so far, and the other one will be up shortly.

The next slide are significant activities that the NRC has performed since that March 11th meeting. On April 4, we held a meeting in Headquarters. I'll ask Tony Mendiola to summarize that meeting.

MR. MENDIOLA: Good afternoon. On Friday, April 4, FirstEnergy met with the NRC Headquarters staff personally and the NRC Regional staff via videotelephone to discuss some results of some Reactor Coolant Leakage Simulation Testing that was performed by one of their vendors.

The purpose of this testing, or if you will, the simulation, was to determine the, what was going to be seen at the, what could be seen by the instrumentation available

to FirstEnergy when they performed their Normal Operating Pressure Test here in the near future.

The concern was, after the degradation was found at Davis-Besse, there was some deposits found on the bottom side of the reactor vessel in the vicinity of the reactor vessel in-core monitoring instrumentation nozzles, which are on the bottom of the reactor.

And, they, FirstEnergy took samples and did some analysis of the samples. And, it was very in conclusive of the origin of these deposits, and raised enough questions that it was felt that they needed to do some testing to determine when the reactor was restored to power, that there would not be any, that these deposits weren't as a result of leakage from these bottom vessel nozzles.

In that, they asked their vendor, contractor, Framatone, to conduct testing at the Lynchburg facilities in Lynchburg, Virginia, to determine what was, what could be visibly seen by the equipment, which would be available at the conclusion of their Normal Operating Pressure Testing, and to make sure that they could see, if there was any leakage found.

Conversation with the staff discussed a lot of the testament, analogy, and some results, basically identifying what would be found at certain very, very small leak rates. And what would be found, of course, would be

deposits of Boron in the, in the sample area, or the leakage area.

Bottom line though, the conclusions came -- the contractor came to the conclusion, and FirstEnergy also came to the conclusion, that any reactor coolant leakage would be confidently, visually discernible by the equipment that would be used by the Licensee at the conclusion of the testing.

After that point, there was a discussion of the test itself, and the facility's inspection plan on how that test would be carried out and what samplings would be performed on any deposits that may be found, or if they were found in the bottom of the reactor vessel.

Additionally, there was additional information provided about the new Leakage Detection System to be placed in the reactor containment; basically, the FLUS System, which we've discussed in the past. And that was basically the meeting.

MS. LIPA: Okay, thank you, Tony.

Earlier today, we held a Public Exit at the Davis-Besse facility. I just wanted to mention what that was all about.

That was the preliminary findings and conclusion of a special inspection and a supplemental inspection to look

1 into utility's corrective actions for some white findings
2 in the Radiation Protection Area. And, as a result of
3 those two white findings associated with inadequate
4 radiological controls during steam generator work last
5 February, 2002, we performed a follow-up inspection to
6 ensure that the root cause and contributing causes were
7 understood. That they independently, that the utility
8 independently assess the extended condition, and to ensure
9 that the corrective actions were sufficient to address the
10 root and contributing causes and to prevent recurrence.
11 And then we also, as a result of the Restart
12 Checklist item that talks about the Radiation Protection
13 Program, we also reviewed the scope, depth and quality of
14 the Licensee's look at their very detailed review that they
15 did of their Radiological Controls Program.
16 And, there were four inspectors involved in this
17 inspection, and that report is scheduled to be out in 30
18 days.
19 Also, a couple of other things on this slide are
20 some recent NRC inspection activities that are either
21 started or completed since then. On April 7th, we
22 initiated an inspection that we call our Phase 3 of the
23 Organizational Effectiveness and Human Performance
24 Inspection.
25 On the NRC's inspection in this area is reviewing

the Licensee's Management and Human Performance Excellence Building Block, which is part of their Return to Service Plan. It's also an NRC Restart Checklist item. And this inspection is being performed by us in three phrases.

The first phase was an examination of the root causes. The second is an examination of corrective actions for those root causes to ensure that FirstEnergy has identified the appropriate corrective actions. And the third is an examination of the corrective actions once they are placed to assess their effectiveness prior to restart.

Phase one of that inspection is complete and that report has been issued. Phase two is mostly complete. And Phase three was begun on April 7th, with a team of industry and NRC experts in this area. And the third phase is expected to be conducted as Licensee activities are completed in the upcoming weeks. Right now we have that scheduled for May 9.

Couple of other items. On April 11, we completed two important inspections. The first one was on the newly modified emergency sump in the containment. This inspection reviewed the design and installation of new screens and the greatly expanded surface area on the sump.

The second inspection we just completed was the Integrated Leak Rate Test on the Containment Building. The NRC had inspectors review the test procedures, monitor the

1 test, and evaluate the results to ensure that it meets the
2 leak tightness requirements.
3 Both of these reports are expected to be issued in
4 May.
5 The next slide talks about some of the Restart
6 Checklist items, the status of those. We have several
7 Restart Checklist items that will be closed, and those will
8 be documented in Inspection Report 0304, which is due out
9 on April 30.
10 The next slide is some upcoming NRC activities. We
11 have, we're making preparation for the under-vessel head
12 inspection. Tony talked a little about the meeting we had
13 at Headquarters on April 4th to talk about the approach for
14 this Normal Operating Pressure Test.
15 We also are making preparation for our Fire
16 Protection Inspection in April. The Restart Assessment
17 Team Inspection will be coming as thing get closer to
18 restart, but still before restart.
19 And then also we're working with the utility to plan
20 two additional public meetings; one, to discuss Design
21 Issues, and another one to discuss the Licensee's
22 assessment of Safety Culture.
23 The next slide on continuing NRC activities. These
24 are some inspections that have already started and continue
25 to be ongoing. We have several inspectors looking at

System Health Reviews and Design Issues. We also have a separate group of inspectors looking at the Safety Significant Program Effectiveness. Several of these programs have been reviewed, but there are still a couple more that need to be reviewed.

Then the Corrective Action Team Inspection was started. And that would be continuing. And this inspection is a pretty important inspection in our minds. It's to review the effectiveness of corrective action process at Davis-Besse to ensure that it's being effectively implemented and appropriate corrective action is taken to prevent the occurrence of problems.

That team is also looking at several key issues for the panel to make their assessment of the implementation of the Licensee's Corrective Action Process. That team has eight people on it, four of those are contractors. This is an extensive inspection, which is scheduled to be completed in May.

And then also we have the ongoing Resident Inspector. They're here, both of them, on the site all the time, day-to-day operations, watching day-to-day activities, and they issue reports every six or seven weeks.

So, this is my summary of the NRC activities that have been ongoing. And with that, I'll turn it over to

1 FirstEnergy.

2 MR. MYERS: Thank you. We

3 have on the agenda a few things that demonstrate some of

4 the issues that we have and also continued progress that

5 we've made.

6 First, we'll talk about the Operations area. Randy

7 Fast will provide you some input on the upcoming Mode 4

8 preparation, which is our next milestone.

9 Then, Bill Pearce will discuss the Operations

10 leadership in our plant and the operability evaluations.

11 And you requested that last month.

12 Bob Schrauder will discuss some of the emerging

13 issues we have, specifically in the high head safety

14 injection pump area.

15 One of the major milestones we just completed, we

16 thought demonstrated a very good teamwork now, is the

17 Integrated Leak Rate Test; and Jim Powers is going to brief

18 you on that test. That's where we pressurized our

19 containment building up to design specs and prove its

20 leak-tight containment. So, Jim will discuss that.

21 Then finally, if you go look at the resolution of

22 some of our significant issues, we'll provide you some, a

23 list of those and some discussion there.

24 Then, in the Safety Culture area, what I thought we

25 would do there, we provide our own Safety Culture

1 Assessment back in Mode 5, prior to going to Mode 5.
2 That's something we did internally using our process.
3 We also finished the, Sonja Haber report that we
4 received this week. I'm going to brief you on some of the
5 issues there, prior to the official public meeting of that,
6 to give us some idea of the things we saw.
7 And if time permits, and we're moving over there,
8 then Mike Stevens will talk about some of the upcoming
9 milestones, the modification of the resources that there
10 are in place to complete those activities.
11 Then Clark, as usual, will give you some of the
12 Restart Action's planned performance indicators. That's
13 our game plan today.
14 Randy.
15 MR. FAST: Thank you.
16 Good afternoon. Today, I would like to take a few
17 moments to discuss our Operation's staff preparation for
18 Mode 4, as well as some actions that we're taking for
19 restart.
20 Actions that we've taken; we did an analysis, an
21 evaluation of the plant staffing; that's in the nonlicensed
22 reactor operator and senior reactor operator positions; and
23 we find that we are appropriately staffed to continue safe
24 operation. That was in part because we didn't complete our
25 annual requalification of all of our licensed individuals;

1 that's reactor operators and senior reactor operators, the
2 latter part of 2002 successfully. All candidates passed
3 their annual requalification.
4 During this period of time, throughout last year and
5 into this year, we continued our licensed operator
6 requalification training program. And that's really
7 serving us well in being able to get our staff, the crews
8 back in the classroom. We have done a lot of Just-In-Time
9 Training. This is a training that we don't traditionally
10 do, things that I'll cover a little bit of it, but we've
11 actually been able to roll out new procedures that I'll
12 talk about a bit.
13 We also still have two reactor operator and senior
14 reactor operator pipelines. So, that will assure that
15 going forward, we'll have adequate resources.
16 We did use those resources to help us. In fact,
17 I've gotten very favorable feedback from the folks that
18 were in the class. Their willingness and really desire to
19 come over and help the plant during this time. As a matter
20 of fact, our mode, whole resolution team, which I'll talk
21 about, consists of principally licensed operator
22 candidates.
23 So, this, has been an experience where they've
24 actually been able to contribute to the success of the
25 plant and take an active role in some of the activities

that we have ongoing. They will be going back into the classroom the latter part of the second quarter. That's about the June timeframe, to go back into licensed training.

We have developed and have approved our procedures and are ready for the test plan. These are newly developed procedures that encompass things like post modification, post maintenance testing, and as well, our inspection plans at the various hold points during the escalation of the plant.

During this period of time we have used the Institute of Nuclear Power Operations using industry experts that come in each week; and taken a look at how we're doing in the Operations arena. And, we've actually had pretty good feedback. We have some areas for improvement, but we've also had validation on some of the actions that we've taken. So, that's been a valuable process to our operations in looking at the things that we're doing.

We did complete, as part of those that requal cycle, Safety Conscious Work Environment Training. Certainly, we've talked about it for all of our leadership, our supervisors, but as well, we took this as an opportunity to teach all our Operations staff, and that was received very favorably. So, even down to the nonlicensed operators, the

1 equipment operators, have been trained in Safety Conscious
2 Work Environment.
3 We did have a self-initiated plan, really our shift
4 managers, I want to make sure I give them credit. They got
5 together and said, here's the kinds of things we need to be
6 doing to improve our leadership and oversight and set
7 Operations up as the leaders of the plant.
8 That Phase One Action Plan had 92 individual
9 elements associated with it. 82 of the 92 have been
10 completed. And then, we'll be moving from that on to a
11 Phase Two, the next generation of Operations Leadership
12 Plan initiatives.
13 We have taken the initiative to train our key
14 staff. That's all of our senior reactor operators, but as
15 well, many of our key station engineers and critical people
16 from various organizations throughout the plant; chemistry,
17 health physics; in what we call Operability Determination.
18 As you're aware, it's under Generic Letter 9118, really
19 understanding the regulatory processes for determining
20 equipment operability and nonconforming conditions.
21 That was done, in fact, Jim Powers and myself were
22 in that first class. Very interesting. Very enlightening,
23 and it also had a side bar or a side benefit of really
24 allowing our folks to come together and work as a team, as
25 we would expect them to do under the conditions where we've

1 got conditions not as we expect. And we're using the
2 guideline of Operability Determination to resolve issues.
3 MR. THOMAS: Randy, to what
4 extent will your equipment operators be trained as far as
5 Operability Determinations are concerned.
6 MR. FAST: Scott, we've taken
7 no formal actions to train the nonlicensed operators in the
8 Operability Determination; however, they are running point.
9 And so, what we, really their view of the world is, they're
10 out in the field monitoring plant conditions; and where
11 plant conditions don't meet expectations, then we write a
12 condition report, elevate that to the shift manager; and
13 that's where you may get into a condition.
14 As an example, I'll give you a specific. So, we
15 haven't trained them formally in the Generic Letter 9118
16 criteria, but we have trained them that is the first
17 threshold of identification. So, if they saw something
18 like pump seal leakage, we want to elevate that to the
19 appropriate levels in the organization to say, is that a
20 nonconforming condition or does that render that piece of
21 equipment inoperable.
22 So, there is, what I'll say is, awareness by the
23 operations of the nonlicensed staff and their
24 responsibility to identify issues, or problems.
25 Does that answer your question?

MR. THOMAS: Yes, somewhat. Same question with your ROs, not your SROs, but your ROs.

MR. FAST: Okay, the reactor operators did not, were not specifically targeted as part of the Generic Letter 9118 Operability Determination Training, but as well through the license requal, we have had discussions with our staff about the premise and the need to use that regulatory process for Operability Determination. So, they did not formally attend the two-day training for Operability Determination.

MR. THOMAS: So, I guess going forward, are there any plans to include them in that training or is that -- or some part of that training, maybe not the whole thing?

MR. FAST: The identification, and certainly what we're doing, we're folding back in Lessons Learned from the Operability Determination, so that we understand where we've done a good job and where there is areas for improvement. But, just from our own internal processes, as well as regulatory processes, our reactor operators do not make the call, so to speak. They're not the ones that actually sign off on Operability Determination. That is done by a senior licensed reactor operator.

MR. THOMAS: I understand that,

1 but I'm looking at it from an identification issue, or
2 standpoint, you know. They're in the control room, they
3 see the indications. I mean they would have -- I mean
4 they're the front line of defense, I guess, if you will.
5 So, if they were aware of the, I guess, complexities
6 involved with the operability calls.
7 MR. MYERS: What we can do
8 is, we can write a CR on this, and do a needs analysis for
9 training, and determine what needs they need to have. We
10 probably would not train them to the specific area that we
11 would the shift manager, but apprise them of overall
12 knowledge that we would look at in the training room.
13 MR. FAST: I'll take that
14 action. We'll do, through our systematic approach to
15 training, we'll do a needs analysis and determine if that's
16 appropriate.
17 MR. THOMAS: Okay, thanks.
18 MR. FAST: Thanks, Scott.
19 Lastly, on this slide, we did implement new
20 standards and expectations, and those have routinely been
21 reviewed by industry experts as they look at our operating
22 staff, and these standards meet or exceed industry best
23 practices.
24 In fact, it's part of our turnover process, at each
25 and every turnover, the operations crew used one of the

1 selected standards. And I went to Ops turnover yesterday;
2 and we've actually driven that down to where our equipment
3 operators are preselected to come in and be prepared to
4 discuss an expectation or standard, and that generates crew
5 discussion. That seems to be working well for us.
6 Next slide, please.
7 Okay, just to take a look at Mode 4 and Mode 3, the
8 things that we have planned. There are really three
9 specific plateaus for testing. The first is Reactor
10 Coolant System pressure walkdown of 50 pounds per square
11 inch gauge. That's a visual examination. All of these are
12 done by a team approach, using Operations and qualified
13 engineering staff to do the walkdowns.
14 Additionally, we have a test at 250 pounds. We'll
15 call it Augmented Leakage Test for Reactor Coolant System
16 Components. Those that had been, work had been conducted
17 on those components, and we want to go verify their leakage
18 condition at that intermediate pressure. And then when we
19 get to full operating or normal operating pressure,
20 conditionally, we'll do walkdowns of components for the
21 Reactor Coolant System.
22 Next slide, please.
23 One of the big challenges is just the administration
24 associated with closing mode hold restraints. And I have
25 current data that's listed here. This principally is

compilation of issues required to be cleared or resolved prior to making the mode change. And those consist of condition reports, corrective actions, work orders, surveillances, which are license compliance tests to meet the regulatory requirements. And we're making steady progress towards Mode 4. And without going through some specifics, you see the rack up on this slide.

And, the last item is, as we get ready for going into routine, I'll call that routine operations, where we're pressurizing the plant, we'll start reactor coolant pumps, heat up the Reactor Coolant System. Operations staff is, certainly has not been operating the plant for quite sometime. And it's pretty much a normal industry practice that we would bring in external oversight, key individuals to be, monitor plant operations 24 hours a day, 7 days a week, to provide real time feedback for our operating crews, to ensure that we're meeting our own expectations and industry standards of excellence.

That's really all I had from Operations Readiness. Are there any questions?

With that, I'll turned it over to Bill Pearce.

MR. GROBE: Not quite. I was making sure nobody else had any questions before I asked mine.

MR. FAST: Yes, Jack.

MR. GROBE: The Operations approach to restart, is a very, very important area in my view. And it's one that I would like to see on the agenda each month going forward.

There were a couple of items that you talked about that I had a couple of questions on. The Just-In-Time License Requalification Training, you emphasized that a little bit on your actions and preparations. Could you give a little bit more detail on specifically what topics you've been training on now; then as we approach next month and the month after, how you're expanding that and building on it for approaching each mode as you move forward.

MR. FAST: Well, Jack, there is a whole number of actions and items that we've been doing. Let me be specific in telling you some of the activities that we've actually used our control room simulator.

The simulator is a real model of the plant. And we've gone through most of the evolutions of filling in reactor coolant system, starting the reactor coolant pumps, pressurizing the plant, heating up the plant, using the procedures that we've developed actually in the simulator. And that's given the crew the opportunity to practice plant operation before we actually conduct those evolutions.

Other training that we've had is the actual

classroom training associated with those procedures. So, typically, we would train in the classroom, go through a detailed discussion, and then the crew would go into the control room simulator and actually conduct those evolutions.

So, that's been one of the principle things that we've been able to do as part of licensed operator requal training.

MR. GROBE: Do you, are you accommodating this training in the normal requal cycle?

MR. FAST: Yes, we are, Jack.

MR. GROBE: And, how often does each crew rotate into a requal training week?

MR. FAST: Typically, we have six crew and they operate one week out of six. However, we have four, what we call, super crews. So, we've changed the periodicity a little bit, so we are on an abbreviated cycle. That's actually given us some more opportunity for training.

MR. GROBE: So, you're on a four crew rotation?

MR. FAST: Right, four crew rotation right now. And that has given us more of our folks available to support initiatives running through the

day shift.

MR. GROBE: Okay. As you approach major milestones, would you be doing additional Just-In-Time Training with crews that are actually going to be doing those evolutions?

MR. FAST: Yes, we will.

MR. GROBE: I think it would be useful to hear about your experiences in this area on a regular basis.

You've highlighted two areas where you're getting outside assessment; one is ~~IMPO~~ INPO and industry evaluations that are ongoing now, and the other is direct oversight of coaching or feedback of control operators. Would it be possible next month to get some details on feedback that you've received from these folks and opportunities that they've identified for continued growth?

MR. FAST: That would be great. I can give you some right now, if you want. I can give you a couple examples each of things we've seen that are working well for us, a couple items that we really need to improve in.

I'll start with a couple of areas for improvement. We've seen -- this is one of the these good/bad. On major evolutions, we've had good prejob briefs. I know Lew and myself and others as part of the staff have overseen some

of those briefs. At a higher level, more complex activities that had good briefs.

The shortfall though is more the routine day-to-day tasks, we've not done a good job of briefing that and setting standards and expectations. So, that's that mixed, got a lot of focus on prejob briefs, but at that routine level, we're not getting into the detail and challenging our equipment operators and reactor operators on what could go wrong, what are compensatory measures that we should be taking. So, that's an area of focus in getting a more broad spectrum of prejob briefing.

The other are, what I'll call, missed opportunities for coaching by our first line supervisors in the control room. That's the control room supervisor directly overseeing the licensed operator duties of the reactor operators, as well as equipment operators. And this is another one of these kind of good news/bad news stories.

The shift managers have received very good feedback about leadership and ownership and willingness to address issues with the plant staff. We need to drive that down lower into the organization. We need for our first line supervisors in the control room to be more comfortable in coaching opportunities with our plant staff.

So, those are, there is some of the, the highs and lows; and I have lots of other examples. But I think it's

important, particularly useful to us in that one of our industry peers comes in to make that observation, our staff is much more liable to accept that critical feedback, than if we provide it internally. We certainly provide it internally, but when an industry peer comes in and says, here's something we see, our Operations staff takes a notice of that.

And so, that's a good thing, I believe, really raising the standards for our staff.

MR. GROBE: Okay.

MR. MYERS: I'm able -- two of the Ops managers that were here; one of them, ops manager from ~~Mod~~ Mode three, that's pretty consistent with the message that I got also. They talked about routine evolutions, that we get ~~lacks~~ lax in communications, and also shift manager not comfortable coaching, I guess is the word, you know, in the field, and not getting in the field as much as they should. But they also compliment some of the standards of our shift managers as a whole, both people did. So, it's pretty good feedback from them --

MR. GROBE: Okay, good.

MR. MYERS: -- at this point.

MR. GROBE: You mentioned that the standards and expectations meet NRC's best

practices, and that you're encouraging feedback in team discussions during each shift turnover. Would it be your expectation then that some of these areas; communication during more routine evolutions, these are areas that you expect to see discussed during these shift turnovers.

MR. FAST: That is correct. Those are in the standards and expectations that are routinely discussed, so we use that as a platform to define our expectations.

MR. GROBE: Okay, good. The operability and determination training, when was that completed?

MR. FAST: It went for several, I think six weeks. So, there was a group that ran two days, for six weeks running; and it was completed about, I want to say about two months ago.

MR. GROBE: Okay, great. Thank you.

On slide five, you indicated several walkdowns of the Reactor Coolant System. The first one with 50 pounds per square inch gauge, that would be done at Mode 4; is that correct?

MR. FAST: That is correct.

MR. GROBE: And the other two at 250 pounds per square inch gauge and normal operating

pressure, those would be at Mode 3?

MR. FAST: 250 pounds could be done at Mode 4.

MR. GROBE: That's still Mode 4, okay.

MR. FAST: Yes. And we could actually do the 50 pound in our current mode. What we do is pressurize the plant using nitrogen. So, we're in a transition point, but we actually have that capability to pressurize the plant with nitrogen and perform that leak evaluation.

MR. GROBE: Is that what you're planning on doing?

MR. FAST: That will be the first step, yes.

MR. GROBE: Okay, good. When do you plan on doing that?

MR. FAST: Well, Mode 4 is currently targeted for the mid part of May.

MR. GROBE: I'm sorry, I misunderstood.

MR. FAST: I was going to back up from that.

MR. GROBE: Okay.

MR. FAST: So the activities

we're currently working toward is the full system restoration of the Reactor Coolant System. And so, Jack, it's about two weeks away. I don't have the specifics, unless, Mike, do you have something?

MR. STEVENS: I can get the specifics for that. Randy is right, it's about two weeks away.

MR. GROBE: About two weeks is fine.

MR. STEVENS: We're working through air-operated valve work currently, and Jim is going to talk about that.

MR. GROBE: Okay, very good.

MR. MYERS: One of the things, Jack, if you ever look at pressure temperature curves here, it's not desirable to get into Mode 3 and sit there, because the demand is very -- Mode 4, sit there in between Mode 4 and 3, so once you get to Mode 4, you want to continue to go up, because it's only like a 30 pound band in there. It's not comfortable operation time. So, the idea is we would not do that until right before Mode 4.

MR. GROBE: Okay. I have one additional question. It has to do with the weekly indicator that you folks sent us, and it is tracking modifications for restart.

I noticed over the last two weeks, that that indicator has gone up some 20 modifications.

MR. MYERS: 30.

MR. GROBE: 30. Thank you. That was a surprise to me, to see that number going up. And I was wondering if you could comment on that and give me an indication of how many of those modifications are Mode 4 restraints.

MR. STEVENS: Well, I don't know how many of them are Mode 4. That number of modifications includes set point changes, anything that has to do with an engineering change request.

MR. GROBE: Sure.

MR. STEVENS: And we're currently going through some part obsolescence issues as well as making modifications to the plant.

I can tell you there is 433 work orders. And in those 433 work orders, are the modifications to take us to Mode 4. And, I don't have the exact number here.

MR. MYERS: Jim, do you have that with you?

MR. POWERS: No, I don't have the exact number either, but while we're going through corrective actions, as we finish our condition report evaluations and corrective actions that are related to

modifications, that they were reviewed by the Restart Review Board and categorized as restart as appropriate and added to the schedule. So, we are preparing schedules that support the field work with modifications now, and we'll have to get you the precise number of those, Jack, to sort out which ones are Mode 4 restart group.

MR. MYERS: I looked at that just the other day. Just a handful of most of the mods work as we come back down, then we have all the mods for diesel, the air dryers. There is some relay work that we have to get done before Mode 4 to make the mode change. But if you go look at the total of those mods, there is not many of them associated with Mode 4 change.

MR. GROBE: That's interesting. Scott and I will have to get into some more detail on that. It just surprised me at this point in time to see the number of modifications going up. I recognize some of those might be simple, but any modification is a bit more complex than a routine corrective work order.

And the source of those, I think you said, Jim, was corrective actions from those Condition Reports that are just now being evaluated?

MR. POWERS: Right. As you, as we've talked about in the past meeting our performance indicators on the wall, back on the audience, we have been

working through Condition Report evaluations. And once a problem is identified, then the engineers, and other people at the plant, evaluate a problem; and if a resolution is indicated as a modification required, we perform the modification.

We are finishing off all those Condition Reports now. Some of the more complex ones are ones that still remain to be done, as we finish off the last small groups of them. So, some are a little more complex problems are being resolved, detailing modifications.

MR. MYERS: When we went into this outage, we did not have what I would call a robust ~~AOD~~ AOV program. And we looked at how many valves, Jim?

MR. POWERS: We looked at a total of 83 valves, air-operated valves in the plant. And we created a program to better design their design basis and provide analysis, calculations that have demonstrated their margin of safety, margin of capability. Out of those 83, there were six valves that needed to have field adjustments done, and twelve valves that needed to have some modification done to them; things as small as a spring change, but then as large in the case of one valve, makeup ~~free problem~~ three bravo valve, change in the actuator and the valve body itself. So, we have twelve modifications that came out, relatively recently, probably within the past month

that we've been engineering those.

MR. MYERS: Realize, those 12, they're in Mode 4, okay, you know, those kind of things. And it's make up -- is the long lead time on those. All those are in the schedule for Mode 4.

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

MR. PEARCE: Thank you, Jack.

What I'm going to talk about is the Quality Assurance Group's view of Operations. And, the operational activities that we've looked at are water level control, fuel load, specifically the SRO duties and the Operations interface with fuel load, maintenance support, which is a clearance, is all the support work that Operations does for maintenance activities, and the Integrated Leak Rate Test. And that, was a fairly complex evolution, and I'll talk some about that later.

First of all, on the shift turnovers, we think there is a good solid turnover process in place and being utilized, and that there is consistent focus by the Operations group on standards and expectations during these turnovers. That's, of course, what Randy said, it's going to have some redundancy to what Randy said.

One of the things we thought that was good with,

1 demonstrated some operations leadership in this area was
2 the shift manager went to the work management turnover, and
3 didn't get enough detail, he thought, to do an adequate job
4 of informing his shift of what was going to go on in the
5 next shift. So, he insisted that they go into more detail
6 on all the turnovers and the work management area, so they
7 could get the proper amount of detail.
8 He got some push-back on that, but he sustained his
9 position and was able to get a change in the ongoing
10 process, so that he got the right amount of detail out of
11 that. And, we saw that as a good thing.
12 Under the area of clearance activities; you know,
13 what we're doing now is mostly a maintenance support
14 function in Operations, but they are hanging a lot of
15 clearances, removing a lot of clearances. It takes
16 attention to detail, following the clearance process,
17 making sure we get the right thing done every time.
18 We have seen a few minor instances where we didn't
19 get things done properly, but in the majority, vast
20 majority of incidences, they did a very good job of hanging
21 the clearances, maintain the proper control, removing the
22 clearances and making a safe place for people to work.
23 Under standards and expectations, I talked about
24 that earlier under shift turnovers. The new Operations
25 standards are discussed daily. It's like I said, turnover

1 process, they go through them, Randy talked about that.
2 The supervisors reinforce the standards frequently. And
3 it's our view that the operators seem to be adapting the
4 new standards.
5 Now, we do see lapse in three-way communication
6 sometimes, and some minor instances like that, but in
7 general, we think there is a good set of new standards in
8 place, and, and Operations is striving to do those very
9 consistent.
10 Another example in that area of standards and
11 expectations, there were 403 Condition Reports written in
12 the first quarter by the Operations Department. Give you
13 some idea that they're focused. Even though the plant is
14 not operating, they're out there focused on the details of
15 the plant.
16 Some examples of conservative decisions and
17 Operations leadership. Early this year, Ops was the
18 station leader. In fact, Randy Fast represented them in
19 that area. They wanted to have two decay heat pumps
20 available for core load, even though the tech specs only
21 required one at the time. And they sustained their
22 position there. Randy supported them in that. And I
23 thought that was a good thing. They were the ones that
24 actually brought that forward.
25 During the reduced inventory operations that we

1 watched, they prohibited water transfers in the auxiliary
2 building, because they knew their reduced inventory and
3 they didn't want to do any evolutions that might risk that
4 inventory; and we thought that was a conservative
5 decision.
6 Ops, and this was not too long ago, Ops generated a
7 Condition Report to perform a collective significance
8 review of emergency diesel generator reliability. There
9 has been a lot of small individual things with the diesel,
10 and they wanted to look at it from a collective
11 significance perspective; and they got that done. And we
12 thought that was good.
13 And the procedure here, one of the things that we
14 witnessed recently was the Integrated Leak Rate Test. It
15 is a complex test, a lot of valve lineups, and each one of
16 them has to be done correctly so that you don't get leakage
17 through there as you pressurize the entire containment
18 vessel.
19 The procedures were followed well. Complex set of
20 operations were done. And they did accomplish the required
21 configuration control. And I think we're going to talk a
22 little later about the success of the Integrated Leak Rate
23 Test. Well, they had a big piece of that, and they did a
24 very professional job of accomplishing that.
25 MR. THOMAS: Outside of Ops,

what's your assessment of procedure usage within the other departments, engineering maintenance, or are you prepared to talk about that?

MR. PEARCE: Well, I think in the work order process, Scott, it would be my opinion, is where I think we're the weakest still; as we get into work orders and our adherence to the specific requirements in the work orders. And those are a maintenance procedure, so to speak.

And that, we put a lot of focus in that area, both in the Construction Department and the Maintenance Department out of the Quality Assurance Department, and we've seen some issues. In fact, the feedwater heater that we struggled with there for awhile, a lot of that, in my opinion, was driven by the lack of adherence to the process.

So, we tried to intervene and get some attention on those things, and we're still seeing instances of those.

MR. MYERS: Feedwater heater was a problem.

MR. PEARCE: Right. We didn't hold the right temperature, didn't get the right weld, had to grind them back out again; things like that. Those are some examples of where we've seen not so good procedure here.

MR. THOMAS: What have you done to prevent that from recurring in the future?

MR. STEVENS: I can answer that. We took the crew that was working on the feedwater heaters, and sat them down with the maintenance folks at the station and interviewed them, and then put them back to work and did some observations.

And, what we found was, some of these folks, even though they went through the training at the plant, and specific, specifically to our administrative procedures, they didn't fully understand how to work at the facility and use the work order and what the expectation was.

We stopped the job. We set up training. We used our SAT Process for Systematic Approach to Training. Did a needs analysis, and involved the Maintenance Services Superintendent to ensure the training was adequate. I involved the Safety Department.

Because it was more than just in the welding procedure, we found that they didn't understand fully our compliance base procedure. They were trying to read it and understand it, but they didn't understand some of the terminology.

And through training, we've improved performance of that group. Put them back to work, after face-to-face discussions. And then I used our Quality Control

Organization to periodically go out, through hole points and without ~~hole~~ hold points, just to show up at my request, and do some on-the-spot inspections.

When we came to nondestructive examination of the feedwater heater, I had our qualified nondestructive personnel go out and take a look at how we were performing that. We found in that instance, where the nondestructive examiner for the vendor wasn't complying with his own procedure. And we challenged him on that, and ended up reaching a resolution and rewriting his procedure. Actually, we used our procedure to finish out the nondestructive examination.

MR. PEARCE: Okay, and --

MR. GROBE: Bill, if I could, just one more question for Mike.

MR. PEARCE: Go ahead.

MR. GROBE: The feedwater heater welding issue is somewhat self-revealing as you went to do some testing. Is there some reason that this training effectiveness question was isolated to that group, or are there other groups of maintenance folks out there that are using the same procedures and went through the same training?

MR. MYERS: These are contractors, Jack.

MR. GROBE: Yeah, I know.

MR. STEVENS: We took a look at that, and interviewed our nonnuclear plant services folks. Did some observations on some of the field work they were performing, and we didn't see the same thing, as far as procedure and work package usage. However, what we did find was the quality of the work package was not up to standard. In other words, it was hard to follow the work package as we were making some of the modifications to the containment air coolers.

So, what we did was sat down with maintenance managers, put together a multi-group team, if you will. We had Operations, some Engineering and some of the Maintenance folks, sit down and categorize the types of problems we were having, roll them all together and take a look at where the performance shortcomings were.

And the actions we're putting in place, let me share with you some of the things we saw there. Primarily, it was focused in the Mechanical Department some performance issues, but it wasn't only the Mechanical Department. It was some minor issues in some of the other departments as well.

But the primary cause was lack of preparation, as we're trying to get work ready and get it into the field, we're not able to do Just-In-Time Training on some of the

activities we're less proficient at. In performance, like reactor pump seals, and we identified that as a potential cause. It had the most weight, about 60 to 70 percent of the problem.

The next was, we didn't have adequate supervisory involvement. What I mean by that, we had supervisors sporadically observing and involved with the field activities, not strategically; at the critical point in time, the supervisor is there providing the oversight to make sure the work activities are performed correctly.

We also, the next one, that was the quality of our work documents. As we went through planning work orders, we'd get them to the field, what we found were some of the work packages weren't being returned to the planning to be revised. What was happening was, we were issuing supplement work orders to the work already existed in the field, and that make two work documents you have to work together with. And it was, we found that to be confusing to the workers and the supervisors in trying to manage it.

And those are some of the things we found, the actions were put in place, and have taken some action in four major areas; organize, clarify, monitor and control. We put our maintenance organization back together, and we were spread out a little bit as we tried to do all these activities and get the schedule ready. We used some of our

more talented folks in some key areas, and I think we saw a result of their lack of involvement in maintenance, and it showed up in some work performance issues.

We got them back in, in the departments, and that settled things down. We're clarifying rules and responsibilities.

Am I giving you enough?

MR. GROBE: Yes, thank you very much.

MR. THOMAS: Let me just clarify, so I make sure I understand what you, I understand what you just said. That it's not just limited to work that's primarily done by contractors. That there are some issues with the craft at Davis-Besse as well in the maintenance area that still need resolution.

MR. STEVENS: That's right.

MR. PEARCE: We don't disagree with that. In fact, let me tell you something that we are doing in that bigger picture regard, is we're moving the, the QC Organization back under Quality Assurance. And Lew and I have agreed to do that. He just signed a letter here the other day, and we'll be doing that over the next week or so.

And what we're trying to accomplish there, Scott, is exactly, I think what you're talking about, is we want to

1 get more field time with the people that we have, and not
2 have them -- make them more independent and less tied to
3 the work organization. Elevate, simply elevate the
4 standards some, and give some help to Mike and his group.
5 You know, give him some feedback on how we're doing in that
6 area.
7 So, we're moving toward that presently. In fact,
8 we're going to do it at all three sites, because of our
9 experience here, it's a better thing to do.
10 Okay, in the area of operability determinations, as
11 Randy said, the operators were trained on 9118. Steve
12 Loehlein actually attended the training on that with them,
13 one session of it, to see what, our view of it was. And we
14 thought it was a very good training. And, I think that the
15 Operations guys, a few that I talked to about it, seemed to
16 get a lot out of it, they really enjoyed that perspective.
17 In the area of Operability Determinations, last year
18 in QA we had a concern about the operators documenting the
19 logic for how they made operability calls based on
20 determination from engineering, or evaluation from
21 engineering. And we've seen an improvement over the past
22 few months in the log books and the entries and how they're
23 documenting their logic for making what calls they're
24 making.
25 We still see periodically something that doesn't

seem as good as we would like there, but we get feedback on it, and, but we've definitely seen some improvement there.

In conclusion, I guess what I would say, Ops has performed adequately for the functions we have watched them. We're anxious to see the Mode 3 and 4 operational activity. We're going to provide independent 24-hour, 7-day-a-week coverage of that activity in Operations, so we can get some good insight on how we're doing for these improvements that they've been trying to make. And, we've seen some improvement in the area of Operability Determination and how they've documented their logic.

That's it for me.

MR. GROBE: I just had two questions, Bill. You talked about conservative decision-making, and one of the examples was a decision on water transfers during reduced inventory, and that's an excellent example. I was just curious if that occurred in the planning stage or that occurred in the control room?

MR. PEARCE: It actually occurred in the control room. And, they did talk about it in the planning, but where they actually put it in place was in their control room activities. And it was a contingency issue. In fact, several of the things that they've done, I think they had pretty good contingency plans.

That's one of the things, when Randy talked about the prejob briefs, I think they've done a pretty good job of putting, getting the expected conditions well communicated among the shift organization, and making sure that complies to the plans as things varied, and I have some examples in our review of that area.

MR. GROBE: I think that's excellent that the shift, the control room shift made that decision. But I was just curious, is that something that you would want to see moved out into the planning area, where the shift wouldn't be challenged with that kind of decision?

MR. PEARCE: Well, yeah, no question about that. I mean, we would like to standardize that. I don't, none of the Operations guys -- well, Mike is here, but I don't know if that has been standardized. I can find out.

MR. GROBE: Okay. And, regarding Operability Determinations, I think it was just a week or two ago, Scott identified an issue involving the low pressure injection pumps, which also serve the function in Mode 5 as decay heat pumps. This had to do with the ~~cycle~~ cyclone and separator.

There was an issue that appears to only have been a documentation issue there. It's not apparent that the

operators concluded in their operability evaluation that the decay heat pumps were operable for the mode that they were currently in and that they were only talking about a future mode. Is this consistent with the kind of things that you've been seeing as far as documentation problems?

MR. PEARCE: Yes. In fact, that's the kind of things we have been working on to get some improvement, making sure they get that done well. And it's really important. You know, they know why. The guy that makes that, knows why they come to that conclusion. But for the rest of us, and for the oncoming shifts and all, they need to understand that, because if there is some departure from those conditions, then they need to understand what the basis of the decision was.

MR. GROBE: Okay.

MR. PEARCE: Yes, we do see that periodically, Jack.

MR. GROBE: Okay. Was this part of the training? I realize concept 9118 Operability Evaluation is a fairly broad area, but was this documentation issue part of the training that they received?

MR. STEVENS: Yes, it was.

MR. GROBE: So, that's just a matter of reinforcement?

MR. FAST: Not the log books, but the process of documenting the rationale.

MR. GROBE: Okay. So, it's just a reinforcement issue of examples to make sure that expectations are reinforced?

MR. PEARCE: Right.

MR. SCHRAUDER: Okay, thank you.

I'm going to talk about a few of the design issues, relatively important design issues that we are facing. First one I would like to talk about is the high pressure injection pump. This is I believe a new issue since we last met, came out of some of our Condition Report evaluations and resolution.

What we found is that very fine debris that would make its way to the sump in the event of an accident could result in damage to the high pressure injection pumps during the recirculation mode.

Now, our sump strainer has about, has 3/16 inch openings that allow the water to get into sump to the injection for these pumps, the suction to them.

There are two concerns with the high pressure injection pump. One is what's called the hydrostatic bearing, which is a bearing internal to the pump or in the pump that supports the shaft during its rotation. And the, this is a water supported cool bearing. And the ports that

supply water to that bearing have a 1/10 inch opening that goes to it. So, if there is a 3/16 inch opening in the sump that goes to the suction, there is a potential that you could clog the inlets for the hydrostatic bearing, and therefore cause the pump problems and potentially failure.

The other pump, just other internal clearances within the pump itself, bearings and the like, these pumps have a natural harmonic frequency to them. If you open up the clearance by way of debris getting in and causing some of the clearances to open up, you can cause certain rotodynamics that will oppose the natural frequency of the pump and cause the pump some problems in that regard also.

Listed here, the resolution options that we looked at for that. We looked at providing some additional filtration, whether that be finer mesh on the sump screen itself, or whether we put in a subsequent filter for the high pressure injection pump. That would be basically a backwash filtration system that would be able to backwash itself and send the potential debris back into the containment to the sump.

We looked at modifying our existing pumps. Testing our existing pumps under the conditions that they would see or some combination of those two. And finally we looked at replacing those pumps.

The path that we are on currently is to replace the

pumps. We have purchased new pumps and motors. Both the pumps and the motors need modifications to them, they're not, they're a little bit higher horsepower and higher pressure than our current pumps, so we'll require some modifications to them.

In order to, in the process of going through this, Jack, as we've talked to you, we are supporting, we are preparing a license amendment with analytical support from Framatone for our existing high pressure injection pumps to be used during our Normal Operating Pressure Test.

The reason that the safety analysis shows that that's acceptable is during that sequence of events, the heat, the plant is pressurized, but it's not heated with any nuclear heat. So, even though it's at normal pressure, without nuclear heat and without essentially any decay heat in the system, the system will be pressurized much faster than it would with a lot of decay heat coming down from a hundred percent power.

And what that means, is the high pressure injection system would not have to go into operation off the recirculation mode. It initially comes on, takes suction off the borated water storage tank, a very high purity water.

So, we're preparing an analysis that would demonstrate that we would not need to go into recirculation

for the high pressure injection pumps. That will require a license amendment request to the NRC, which I'll term as a one-time deviation from the current technical specification for the high pressure injection pump.

We expect that analysis out of Framatone this week yet; in fact, tomorrow to do that. And we're working on, supporting that, getting the information for that license amendment request.

We also are continuing to look at the potential to test our existing pumps, and to do a modification. There is a modification that ~~NPR~~ MPR is looking at for us, that the suction to this hydrostatic bearing, is taken off of a fourth stage of a pump, so it's actual water that's going through the pumps, some of it is siphoned off and fed through the hydrostatic bearing.

There is a potential modification that could put a very fine mesh screen right at the suction where that ports off to the hydrostatic bearing. We would mock that up, demonstrate the ability of that to perform, and then we would do some testing of the rest of the internals of the pumps.

Right now I would say that that is a much less likely scenario than replacing these pumps, but we are continuing to look at that.

MR. HOPKINS: If you were to

replace the pumps, do you think there would be any license amendments needed for the replacement pumps?

MR. SCHRAUDER: We don't believe so right now, Jon. They will meet the existing design requirements for the plant when they're modified.

MR. HOPKINS: Okay.

MR. MYERS: Bob, I have a question. This is different. But if you go look at our pumps, the issue is not the ECCS issue, it's the issue for Boron precipitation, and hydroinjection; is that correct?

MR. SCHRAUDER: Some of both. There are some accident scenarios that would require the HPI system to go on recirculation, but there is a long term requirement for the process that we have for, what's called Boron precipitation control. It takes the service line or the mission line for the HPI quite a bit longer than just depressurizing the plant.

MR. MYERS: You go look at our high safety injection pump doesn't take direct suction off the sump. It's a piggyback mode, what I'm trying to say.

MR. SCHRAUDER: Okay, the next issue I would like to discuss, or give you an update on, is the electrical distribution system.

We had a number of Condition Reports, many of them

coming out of the Safety Function Validation Project and the Latent Issue Reviews and the System Health Readiness Reviews, which challenge assumptions and completeness of the analysis for the electrical distribution system.

Much of the resolution or evaluation of those Condition Reports hinge on basically a new electrical distribution calculation. So, we're revising the analysis on a very sophisticated computer software. It's very large and comprehensive calculation. It's very similar to the flow of water through a pipe system, but this is more complicated than that, in that it covers a very high voltage all the way down to the loads throughout the plant, in all the different systems, so integrates the entire electrical distribution system.

We've been working on that analysis for a couple of months now. It is still a couple of weeks away before we will be able to look at the operability of the electrical distribution system, and all of its potential down stream and whether there are any voltage problems in the, down in the 480 and lower distribution system.

MR. GROBE: Have you gotten any preliminary feedback from early calculation runs as to whether or not there is going to be any need for modifications?

MR. SCHRAUDER: No, we don't have

any preliminary runs?

MR. GROBE: You're still building the model?

MR. SCHRAUDER: But it's very near completion. Once the model is done, frankly, it goes very quickly to run the model and be able to see.

But there is some potential that some of the voltage is down at the, at the end of the distribution system, we could potentially have to do some modifications in that area.

MR. HOPKINS: Let me ask you here, Bob. The new computer model, is that an NRC approved computer model?

MR. SCHRAUDER: Yes, it is, Jon, it's ETAP.

MR. HOPKINS: So, it's been approved at other facilities?

MR. SCHRAUDER: Yes, it has.

Okay, another issue on the electrical side, if you will, relates to the emergency diesel generator. We have some issues on the diesel generator.

First of all, our load table was found not to be current, kept up-to-date with all of the loads that are loaded onto the diesel. And, we have a starting voltage and frequency response of the diesel itself, where the test

1 results and data that we accumulated identify that the
2 voltage and frequency responses were not as stated in our
3 USAR.
4 So, we are revising, we have revised the diesel load
5 calculation. We have completed that for the current load
6 and we will need to do some additional work on that
7 calculation, because we're doing some changes in the system
8 during this outage.
9 Things like these HPI pump motors, will be, they're
10 higher horsepower motors than what our current HPI pumps
11 have. We are adding some room coolers to the emergency
12 diesel generator rooms themselves. That will add load to
13 those diesels. And we have some revised Appendix R
14 loading.
15 So, we completed what was the current loading table,
16 but we need to add some more information to it as we
17 complete some of the other things that we're doing during
18 this outage.
19 We are preparing a transient analysis for the
20 voltage and frequency response. We do have the initial
21 confirmation of that, if you will, and have identified that
22 the diesels do not meet the current design specs as
23 specified in the USAR and Safety Guide Number 9.
24 Those specifically being, voltage during the initial
25 load sequencing should not drop below 75 percent of the

1 nominal load. And the frequency should not drop below 95
2 percent. And we found that we do go below those for some
3 very short period of time during the initial load step on
4 the diesels.
5 So, the next step in that is to evaluate what that
6 impact is to the downstream components. And it recovers
7 very quickly in a matter of about, between one and a half
8 and two seconds, that voltage and frequency comes back up
9 to the expected value, so we have to evaluate now
10 downstream as to whether there is any effect on the
11 equipment that's needed to be supplied by that diesel
12 generator. And, we're in the process of completing those
13 evaluations.
14 We do believe though based on our preliminary
15 results that the diesel does have sufficient capacity and
16 capability to start and load and carry its design basis
17 load. So, some of the preliminarily results there do look
18 favorable for the diesel generators.
19 Again, the diesel generators are though somewhat
20 limited with this new motor that we would put in for the
21 high pressure injection pumps. That's one of the reasons
22 why we have to do some modification work. Our existing
23 motors are about 690 horsepower. The ones that we have
24 purchased are a thousand horsepower right now. We'll need
25 to bring those down into about the 800 horsepower range, in

order we don't exceed the capability of the diesels to supply those.

Jim actually already talked about the next issue, which was the air operated valves. Covered virtually everything that's on that slide, so I won't go into that again.

MS. LIPA: I have a question on the air-operated valves. Can you determine how this occurred, how you found that these valves were not properly adjusted and have you shared what you found with the industry?

MR. SCHRAUDER: First of all I would say that I don't think the air-operated valves, I'm not sure if we put an OE out on it yet or not, but it's certainly not a new issue. It's very similar to the motor-operated valve programs that utilities went through, created a motor-operated valve program, and we really are getting into the air-operated valves now.

We have written Condition Reports on the air-operated valves and evaluation of why and how those setups were done. Some of them have been done with the Condition Reports.

MS. LIPA: Okay, thank you, Bob.

MR. GROBE: Okay.

MR. SCHRAUDER: Those were the only issues I was going to cover today.

MR. GROBE: Other questions?

I have just one. I believe that the significant portion, if not all of this design work, has been done by the contracted engineering organizations. In light of recent inspection findings, are you planning on augmenting or modifying the method by which you review and confirm the adequacy of the outside engineering work?

MR. POWERS: I would like to cover that one, Jack.

We are looking at the control of the, the reviews of the technical org. as supplied to us by our outside technical contractors, and there is a couple of steps that we'll be taking. One is looking specifically on how the flow of that review occurs, what our process is, and the requirements of that process.

We're also going to the, our Engineering Assessment Board, to look specifically at a couple of design packages that we think merit a thorough review, extended condition perspective on those. Those are the, the decay heat valve tank modification for the liner there, and also the containment air coolers. Both of these modifications occurred over a long period of time. Different personnel

working on them.

And we believe what we know now, and we're still, we're still probing into details on, on some of the issues that have been found. We think those are modifications that merit a full review, detailed review. So, those are the actions we're planning to take.

MR. GROBE: The work that's done by an outside engineering organization, that's done under a quality assurance program; is that correct?

MR. POWERS: That's right.

MR. GROBE: Are you also digging a little deeper into that to find out why their own internal checks and balances didn't find these?

MR. POWERS: Absolutely. And the contract organization, and this is the organization that prepared our, our emergency sump, some calculations there; were questioned on the detail and calculations. They have their own corrective action report internal to their Appendix B Program, corrective action to investigate exactly what occurred to allow a calculation to come out with some discrepancies in it. So, we'll be monitoring their performance, as well as our own corrective action programs.

MR. PEARCE: We haven't reacted to that yet in Quality Assurance, but we will, Jack, and

we'll go look, and look at just what you're asking.

MR. GROBE: Okay. Good. Appreciate that.

I appreciate your patience on these first two sections of your presentation. These are both very important sections, and fairly complex, and I know we had a lot of questions. I guess I had a lot of questions. I appreciate your patience.

We've been going for an hour and a half. I know, Lew, that you have a flight a little later today, but I think there is a lot of material later that's going to go rather rapidly. I would like to take a five minute break, if we could.

MR. MYERS: We were just getting warmed up.

MR. GROBE: Yeah, it's getting warm in here. Five minutes means be back at 25 til.

(Off the record.)

MR. GROBE: Okay, Randy.

MR. FAST: All right, thank you, Jack.

I wanted to spend a little time today to bring us up to date with the activities that are going on inside of the containment outside of the Integrated Leak Rate Test.

I wanted to at least take a step back and say, what is Containment Health? What were some of the things that we put as part of our plan for activities in containment?

So, I listed the project scope, including the emergency sump, containment coatings, decay heat valve tank, containment air coolers, fuel integrity, our equipment -- environmentally qualified equipment, refueling transfer canal, containment vessel; and, as well, what really generated the whole action plan, was the boric acid extent condition, including the inspections, evaluations and corrective actions.

Next slide, please.

So, I'm going to go through each of these individually and try to bring us current with where we are in the projects.

The Emergency Sump. Of course, the purpose is to ensure long term cooling. That's what collects the water after design basis accident and provides suction to the high pressure injection pumps, as we had talked about earlier. And the status is, the engineering design work has been completed. We've actually completed the field installation. There is a couple of minor things.

I wanted to make sure I'm clear about what is really installation. There is a support echo that had a couple, another corrective action, but for, the majority of the

field work is completed. And we did increase the strainer surface area from the original 50 square feet to what is really industry leading 1200 square feet. And we did complete the inspection. The Nuclear Regulatory Commission came in last week and looked at the design package, as well had an opportunity to walk down the actual sump.

Next slide, please.

MS. LIPA: I did have a question for you, Randy.

MR. FAST: Yes.

MS. LIPA: I know you were doing a transport analysis for the past condition of the sump to support the LER. Are you also doing a transport analysis of going forward on the new design?

MR. POWERS: There is a transport analysis for the new design, supports the new design as part of the modification package. The transport supports the LER in the past operability situation. It's not been started yet. We have a scope discussion ongoing with the contractor that performs that, and we're at the point now where we can begin that process.

MR. GROBE: Appreciate you very early in the process, but do you have some kind of a window that you expect to get that done?

MR. POWERS: I would say it's

in the range of four to six weeks, Jack.

MR. FAST: Just point out a couple of items here. This area right here is part of an access hatch. And, as part of routine inspections, we gain access to the, this is the upper portion of the sump that would allow, it's a bolted lid that can be removed to allow access into the upper sump area.

As well, this is what I'll call porous filtration on the top of the upper portion of the containment sump, and then inside, what you really can't see, but we've shown previously to the top hatch, the cylindrical assemblies that provide filtration.

Next slide, please.

This is what we haven't shown a lot of pictures of, but, and I want to try to provide a vantage point. This is a stairwell right here. So, you see the treads of the stairs going up. This lower portion is under, actually at the elevation below the reactor vessel. There is a series of eight tubes below and some external surface that provides some straining. And these tubes provide transport which are supported by these supports right here. And they incline up and then transition up into the upper portion of the sump.

So, what's unique about this design is, about a third of it is the upper portion and two thirds of it is

the lower portion of the sump.

Next slide, please.

Now, this is another, I think, really an excellent design feature associated with our emergency sump. This is a debris screen gate. On either side at the 565 foot elevation of containment, there is these large steel doors, and they provide lockable access control to those areas, but as well they provide coarse screenage or filtration of debris that would be generated under design basis accidents.

So, these are massive doors. And they really are works of art. Excellent work by our craftsman in putting this together. And these two -- this is door number 1. There is another one on the other side, door number 3. Then there is another door, 2, and 2 Alpha, which are on either side of the transfer canal.

Jack, you're grinning there.

MR. GROBE: I was going to say, only an engineer would ~~do~~ view that as a work of art.

MR. FAST: I'm telling you, you could put this in a museum. You would say, what is it? You would say, it's art.

MR. HOPKINS: Is that solid at the bottom there?

MR. FAST: No, this is,

I'm talking about, this is a support, so this provides vertical support. This section right here just has a smaller grating associated with it. This is 2x -- 1 1/2 inch x 4, like a deck plate, and this is about 4x4.

MR. POWERS: I think, Randy, six inches across the bottom there, right there where you point, it is solid plate.

MR. FAST: Okay. This is a solid plate. This area here.

MR. POWERS: It's the concept, it's graded filtration to hold up small finds of grit at the floor level, stop them there.

MR. GROBE: You said, I apologize for not remembering the elevation, but 565, is that the floor level which is about the top of the sump?

MR. FAST: That is correct. That's the lowest elevation of our containment. Now, we have lower elevations underneath the reactor vessel.

MR. GROBE: Post LOCA water level isn't much higher than that finer mesh, is it?

MR. FAST: It's, this would be 565 elevation, this floor area. And the actual sump or the level in containment would be about two to two and a half feet. So, that's as, all of the borated water storage tank, and the core flood, it's been flowed into the

1 containment building, we would see elevation at about
2 that.
3 MR. GROBE: Okay, thank you.
4 MR. THOMAS: As part of the
5 design package, was there an evaluation done to see if
6 these two coarse screens potentially rob flow to the sump?
7 MR. POWERS: That was
8 considered as part of the design. Depending on where the
9 break would be and which side of the D-rings, on which side
10 of containment; debris would be generated, a lot of debris
11 on that side of containment; and if one of these screen
12 gates were to be full of that debris, the other side would
13 be relatively clean. And there is also the flow path down
14 below the reactor vessel, through those stairwells in the
15 lower part of the sump, that would be -- there is diverse
16 pathways for the water to flow back to the sump.
17 MR. FAST: Next slide,
18 please.
19 Okay, Containment Coatings. Purpose to ensure
20 adequate long term cooling. This is not the purpose of
21 coatings, it's the purpose of the project, was to ensure
22 for long term cooling, we removed degraded or unqualified
23 coatings on components in containment.
24 So, we've done a thorough evaluation of all of the
25 coatings in containment. And, we had a couple of targeted

areas; core flood tanks had unqualified coatings, as well containment dome, which was an older type paint that had degraded.

And all of the targeted coatings, targeted coatings, we still have some unqualified coatings, but they're bounded by our transport analysis, they have been removed using rotopine and needle guns, and we are repainting with qualified coatings. We are just a little more than about a week away from getting out of the paint business here. I'll show some examples of some of the paint.

Next slide, please.

There is a core flood tank. So that, that's one of the tanks that we've, that is, well, it's one of two tanks that have water pressurized to 600 pounds, that go into the Reactor Coolant System on a loss of coolant accident.

All the paint had been removed, and as well, this is where the actual water, it's pressurized from above. This is the volume of fluid that's borated, and it comes through the core flood and into the core flood nozzle. So, those coatings have been removed and recoated.

Next picture, please.

Service waterlines. These blue headers right here are part of the service water that are provided to the containment air coolers. We have three containment air coolers. These are isolation valves here.

One of the things I wanted to note, you don't get the clarity in this picture, but part of our initiative to improve the indemnification of assets or components in containment was to change out old metal tags with new. They're a polymer type of high density qualified on a design basis, and attached with aircraft cable. And they're bar coded as well for future options. You can see a little bar code on this one here.

We can use that then to actually verify containment clearances, as we close that, you can tag that and you know you're on the proper component.

Another interesting point is that all of these lines have been cleaned internally, hydrolased and flushed. So, these lines that had some carbon steel and they had some telltale signs of rust and corrosion have all been cleaned internally. So, paint was removed on the outside, recoated, and cleaned on the inside.

Next, please.

Here is the top of the containment dome, about an acre, a little over 40,000 square feet. You see here the containment spray headers, the upper spray header and lower sprayed header here. And this is the polar crane that extends across the top of the structure.

There is a little fascia right here. This is one that, our painters actually brought this issue forward,

said they felt that was an area that had not been targeted for coatings removal. They brought that to our attention. It had degraded. We had a coatings engineer go look at it. We additionally removed that coating.

You can see here, new white fresh paint. This is an area where paint has been completely removed. This picture is about a week and a half old. We're making excellent progress, and we are just about at being done.

What's so unique about this project is, you see what we call a spider rig. These are basically like window washing rigs that hang from the overhead that our paint crews have used to access these areas. That's what's really been difficult about this project is the accessibility at that high elevation, but this is really a project that is coming very close to completion.

MR. MYERS: Randy, you say we'll be done in about a week with coatings in containment?

MR. FAST: That is correct.

MR. MYERS: So, that closes out a large number of corrective actions and CRs.

MR. FAST: Let me go, I have another section on that. This closes out the painting part of the it, but the other part containment health, we talked about the assets that had some indication of boric acid; that's another part of this program. And we are at the

conclusion of really remediating all of those assets under the corrective action Condition Reports written, inspections, corrective actions. And by the end of this month, we expect to have all those assets recovered and inspections complete.

And when I get to that slide I have some detail, but that was over 6500 corrective actions, which was a significant amount of work.

MR. THOMAS: Before we leave coatings -- are you done?

MR. FAST: Shoot.

MR. THOMAS: Can you briefly describe the types of unqualified coatings that were left in containment that are bounded by your analysis?

MR. FAST: Yes, Scott. Principally what we have is conduit that was painted as part of the original construction. That conduit has coatings that are not qualified, that would be expected through jet impingement, through design basis accident some of those coatings would be removed. We have an estimated square footage and that's bounded by the transport analysis. So, principally, it's conduit.

Next slide, please.

The next area is the decay heat valve tank. This was to ensure integrity of two very important valves, which

operate post-design basis accident, decay heat 11 and 12, ensures that we maintain integrity, because these are below the flooded area that we talked about previously.

So, those valves are not qualified to operate under water. So, we need to be able to keep this vault in a condition where those valves are able to be operated from any time shortly after the design basis accident up to a week after the accident occurs.

And in this case, the engineering design work has been completed, installation is nearly complete. Really, the outstanding actions there are the electrical conduit, our sealed welding, and we have what's called a loss of cooling accident seal that is installed inside of the conduit to ensure that no moisture or water from the external can get down into the electrical components, the valves that are in the decay heat valve tank.

That's about it for the decay heat valve tank. I don't have any pictures of that. It's closed up, welded up. It has an access opening. We'll just go down there for routine inspection activities from this point.

MR. MYERS: It is one of those significant long-term problems that we're really pleased with. I think we have a very robust design on that tank.

MR. FAST: I would say, it

was elective on our behalf, but we wanted to demonstrate the right standards and the right safety consciousness for important equipment that mitigates the event of any design basis accidents.

Next, Containment Air Coolers. What they, the purpose of this particular plan was to replace components that had been damaged or degraded by exposure or long term exposure to boric acid. Additionally, of the three containment air coolers, we had three motors that were part of a Part 21 report, came from the original equipment supplier, and they needed to be remediated.

Fan motors have been replaced. Fans, dampers, duct work, all of the instrumentation have been cleaned, refurbished or replaced. We have a series of different things that we did. The fan inlet plenum has been completely rebuilt. It was galvanized, fairly light weight. It's now a heavy duty stainless steel, will last the life of the plant; and if it requires any cleaning, will be very easy for our staff to go in and clean.

Service water piping to the cooling coils has been redesigned and replaced. I think I've got a picture of that we can look at.

Next slide, please.

Well, excuse me, I'll just finish~~ed~~ the discussion here. Physical work is nearly completed. And just going

to go back, I believe we talked about this, I wasn't at the last public meeting, but we had numerous Lessons Learned from the installation of Containment Air Cooler Number 1; some of which revolved around the engineering, the maintainability long term, operational concerns about the ability of the equipment to be operated properly, and as well, just a craftsmanship of the installation.

We took all of those Lessons Learned, regenerated the project, and went in and very successfully completed that service water connections to Containment Air Cooler Number 2 and Number 3. And we elected, based on the quality of that design, its ability to be maintained, to go back in and we're currently working on Containment Air Cooler Number 1, so that all three of the containment air cooler service water connections will be identical, equally maintainable.

One last item that we'll have to perform, our plant engineering staff will do an air and service water testing, to ensure as you would with any heat ~~exchange~~ exchanger process that we get the appropriate cooling.

Next slide, please.

MR. MYERS: This is a work of art.

MR. FAST: This is. Thank you very much, Lew.

1 These are the service water inlet and return
2 headers. And I'll identify right here what you see are
3 some bellows assemblies. That allows for thermal growth.
4 Under accident conditions, the containment is actually
5 pressurized to about 40 pounds, about 263 degrees. We get
6 what's called two phase flow, as service water is coming
7 into these containment air coolers.
8 This is a very robust design; stainless steel with
9 these thermal bellows. This design will allow
10 maintainability for the new containment air cooler and
11 coils themselves. These are a couple of our craft workers
12 actually doing installation on Containment Air Cooler
13 Number 3.
14 It's been a, really an interesting project, and a
15 lot of lessons learned from it. We actually simplified the
16 design. We made it a little bit too complex originally,
17 and that actually made it more difficult to install. By
18 using a specialty contractor that really specializes in
19 these unique kinds of engineering issues, came in and gave
20 us some hints on how to simplify that design. It was
21 easier to install in a more timely fashion, and we feel we
22 got much better quality.
23 I might just mention one of the concerns. These
24 bellows need to be aligned properly, so we ensure that
25 their flexure is guaranteed. That was one of the issues is

the misalignment of those bellows.

Next slide, please.

Fuel integrity. One of the long term issues is really to insure fuel reliability. As we talked this morning at the public meeting about some of the health physics issues, those issues are borne out of fuel that either has failed or has leakage. And we wanted to make sure that for the long term health of the system and as well the fuel reliability that we go to every extent practical to include the fuel reliability.

We've removed defective fuel rods. We modified and improved the fuel handing equipment. We improved our training and our procedures for folks. A lot of visual checks during ~~fume~~ fuel movement, core load. We actually replaced some of the spacer grids that were damaged.

And, we feel that we are in pretty good shape with our core load successfully behind us. There are no pending activities pending with the fuel reliability, and I'm looking forward to leak free fuel cycle.

Jon?

MR. HOPKINS: Let me ask you, Randy, was the spacer grid damage or any other defective rods traced back to construction of the fuel rods, the vendor, let's say?

MR. FAST: There is two

principle elements, Jon, to answer your question. One is in the design. I will say that the spacer grids are, they're not as substantial as some other fuel fabricators. They have some pros in that there is a lot of flexure capability, but they're not as robust.

And, I have talked with the fuel vendor, and they're actually going to incorporate a new fuel grid design they got from another company that they partnered with. That will improve spacer grid design and limit the amount of damage that's done.

But there's a second element here, and that's the actual equipment that we use. Actually imposes more opportunity to cause grid strap damage, because of very close tolerances on the mast, as you would withdraw or insert fuel, it rubs on the inner portion, and that provides an opportunity for grid strap damage.

So, we took some compensatory measures to ensure that we minimize that hazard. And long term, we're looking to modify the fuel handling equipment to open up some clearances to mitigate those potential effects.

MR. HOPKINS: Okay, thank you.

MR. FAST: Next slide, please.

Environmental qualified equipment. As part of the inspection activities, all assets that are required to be

maintained operability after design-basis accident were walked down and evaluated, and all of that equipment was inspected for signs of boric acid or degradation. All equipment was found to be operable and there was no impact on them, which is really a good thing. That would say the design was robust and appropriate.

Next slide, please.

Refuel Canal Leakage. We have some legacy issues here. This is really a housekeeping issue for us, but one we wanted to look at past leakage from structures and identify any sources of leakage.

We used some new technology, actual sound monitoring equipment, that actually can detect a very low leakage. We did find some examples that are under review and evaluation for corrective action of areas where we did see some low level leakage.

As well, just to ensure, because there is a leakage path, what was the impact on concrete; was there any degradation on concrete; as well is there any degradation of rebar, that steel that's embedded within the concrete. And, we did show some very minor corrosion; however, nothing that certainly affected structural integrity.

And, the corrective actions that we're going to take are under review. It will be done at a future date when the time is appropriate.

I do believe I have a photograph here of a core bore. I'll just point out -- this is containment concrete that's poured. This is a cross-section of a, we actually bore this piece of concrete out, so that we can do analysis of the actual rigidity, the hardness of that concrete. This is where it's actually cut through the rebar.

So, we're able to look at the rebar and see is there any corrosion on the surface, as leakage or water has migrated through the concrete, would come in contact with the rebar. And, there were no issues there.

We also verified that the hardness, the integrity of the concrete met or exceeded requirements for concrete. This is high pressure, high density concrete.

MR. MYERS: What did you do to that hole?

MR. FAST: We grout that. A process, we use high density grout to go back, fill those holes. Those are engineered holes. We don't just go hunting. We know, based on maps, where the concrete is, where the rebar is; and so we actually target those areas, based on those drawings, to get these core bore samples. We know as well, that they don't compromise the structural integrity of the building.

MR. MENDIOLA: Randy, how many bores did you end up cutting?

MR. FAST: A Bunch. I don't have that number, Tony. I can get that number for you later.

MR. MENDIOLA: Okay. And did you find any concrete along any of the leakage paths that needs to be repaired?

MR. FAST: We did not find any examples where concrete did not meet design requirements.

MR. MENDIOLA: Okay, thank you.

MR. FAST: Next slide, please.

The Containment Vessel. That's the actual liner, what I call liner. It's not a liner, it's a freestanding steel vessel, inch and a half steel throughout containment. And we needed to verify the integrity of that containment liner.

We went through a series of nondestructive examinations. All those examinations were completed. The containment is operable. And that was defined as well by the Integrated Containment Leak Test.

We are installing a grout seal to close, there is a small annular gap, both on the inside and outside of the containment vessel. That will seal between the concrete curve on the inside of containment and what's called a sand

1 pocket on the outside of containment.
2 So, that is outstanding work. We've got some
3 proposals of it coming to us to perform that remediation
4 before restart.
5 Next slide, please.
6 Here's what brought us to this issue, which is
7 really the containment inspections. They'll look at all of
8 the assets and components that were affected by boric acid,
9 evaluate those conditions, ensure that we have appropriate
10 corrective actions, and then document as-left condition,
11 which will really give us a good baseline for future
12 inspections.
13 Next slide, please.
14 All of the discovery inspections in accordance with
15 our Discovery Action Plan have been completed. All
16 evaluations have been prepared, as we talked earlier, about
17 6500 corrective actions have been identified. Not all of
18 those are required for restart; however, they were coded as
19 a restart or nonrestart.
20 We have a number here, as you see either restart
21 corrective actions that were assigned. This number has
22 gone up since the slide. I don't have a current number,
23 but all of these will be completed by the end of the
24 month. And the remaining work is primarily just cleaning
25 things, like boric acid on a valve stem or on one of the

assets within containment. We document the as-left condition. It's documented on the Condition Report.

And the last item, actually I got a status this morning on steam cleaning. We're still struggling a bit, but we wanted to actually go inside and steam clean the D-rings. That's partly a housekeeping issue to raise the standards, also decontaminate the areas.

As of this morning, we only had about 31 inspections for assets inside the D-rings remaining. I wanted to get those completed. We'll do the D-ring cleaning as separate issue, but I wanted to complete the actual inspections on the assets in containment.

Next slide, please.

Reactor Pressure Vessel Head. Reactor is completely resembled since the last time we met. Missle shields are installed. We're in our final configuration. Head vent is in. All seismic restraints are in. Cabling is installed. Control rod testing will be done during full pressure test. So, the reactor vessel is fully intact and ready for full pressure testing.

Next slide, please.

MR. HOPKINS: Wait a second. Let me understand. So, you will actually be withdrawing the control rods during the full pressure test, one at a time?

MR. MYERS: No.

MR. HOPKINS: No. So, when you said control rod testing, what testing is that?

MR. FAST: I think it may be, before we'll start the reactor up, we'll do rod testing.

MR. HOPKINS: Okay.

MR. FAST: That is a normal surveillance activity. I think the words are deceiving here. It's not actually during the demonstration test of full pressure operation.

MR. HOPKINS: Thank you.

MR. FAST: Thank you, Jon.

Next slide.

This is the FLUS. This is the containment, in this case, under vessel leakage monitoring system. This is the installation of tubing which actually goes up and under the vessel. It's on the inside of the insulation.

Installation is complete. We are hooking up -- pardon me?

We are installing the plant computer that will allow us to do remote monitoring. And then as part of the pressure test, the demonstration test, we'll have an opportunity to do sensitivity testing to actually calibrate the system and set it up for power operation.

That's really everything associated with the

Containment. I think we're going to get out of Containment Health business in the near term. We'll bring you up-to-date with any additional activities that we have, but at the end of the month, Containment Health is for all intents and purposes going to be complete.

MR. MYERS: You know, that test you saw might be the test where they just move the rod up an inch or so to make sure it's ~~flash~~ flush. That might be.

MR. FAST: Verification of rod length. And I know, Jon, you're probably asking about the rod drop test.

MR. HOPKINS: Yeah. I would like, I would like you to verify that, because if you make any submittal about the HPI pumps for that NOP full pressure test, I would like to know what you're going to be doing with control rods at the same time.

MR. FAST: Understand.

MR. MYERS: You may have concluded that. You're right.

MR. FAST: We'll take that action. Thank you, Jon.

MR. MENDIOLA: If I could ask a question on a previous slide. I hate to take you all the way back to slide 19, your first work of art there.

I can't remember all your debris analysis that you

had, and you talked about this to us months ago, but did you have any screen gates previous to this time?

MR. FAST: We did not.

MR. MENDIOLA: Okay. These gates are at the 565 level?

MR. FAST: That's correct.

MR. MENDIOLA: And LOCA condition, the water will get into the sump at 565 level by what method; down the stairwells?

MR. FAST: There are opening in the D-rings that would allow flow into that area.

MR. POWERS: LOCA approach from both sides, Tony, around the walkway on the 565, you're familiar with the approach walkways to the sump. It can, water can flow 360 degrees around the containment. There is one of these gateways on both sides. Either way. Plus it can go down the stairwell to the lower, below the reactor vessel area where that lower large portion of the sump is.

MR. MENDIOLA: So, there is stairwells, if you want to call that, on both hemispheres on both sides of the gates?

MR. POWERS: Yes, right.

MR. MENDIOLA: So the gates, the LOCA debris loading is on one side of both gates, there is

still water going to be able to get down into the sumps?

MR. POWERS: Right.

MR. MENDIOLA: To the other stairwells?

MR. POWERS: Right. That was the design consideration.

MR. MENDIOLA: Okay. Thank you.

MR. MYERS: Okay, Jim.

MR. POWERS: I would like to talk about a success we had at the site with the Integrated Leak Rate Test in Containment. If you look at the front of your slide package. First slide shows our cooling tower as we build it with the recovery and improvement of our plant. Integrated Leak Rate Test was one of the major milestones that we needed to complete to continue our forward progress. And we performed it well at the site and we demonstrated a very leak tight containment.

The purpose of the test is to demonstrate containment integrity. Following the construction opening that we prepared in containment to move our new reactor vessel head in, we closed up the opening and demonstrated structural integrity and leak rate integrity through this testing process.

The process of testing containment for pressure is done periodically, normally on a ten year interval, unless

there is a reason, a major change, such as our construction, to do it more frequently.

We pressurize our containment to nearly 40 pounds per square inch gauge with compressors as we do this, and then we hold them for stabilization of conditions within the containment and atmospheric conditions. The containment is very large, about 27.8 million cubic feet. So, to pressurize it and then hold it for conditions such as thermal stratification to stabilize is important.

Then we prepare, or we perform leakage test measurements, and our instrumentation that we use for this is very precise. We have 30 temperature elements that we locate throughout the containment. We have ten relative humidity gauges. And we have two precision scientific instruments that measure down to the range of 1/10,000 of a pound per square inch change in pressure. So, that's the reason why we wait for stabilization to get all the parameters stabilized and ready for the test.

We perform a leakage test by looking for any changes in the parameters that may indicate there is leakage. And that test goes on for a number of hours. And, I'll show a curve of the pressure test that gives you a timeline of it.

Then, we validate our test instrumentation by introducing a known small leak out of the containment with

an accurate measurement on that leak, and we watch our instrumentation to assure that it can accurately detect that leak and that validates that the instrumentation is working well.

Then, subsequent to collecting our data, we depressurize and analyze the test data.

Next slide shows the equipment that we need to bring in to the site.

MR. GROBE: Jim, you might want to clarify that you don't actually put a hole in containment.

MR. POWERS: Oh, we open up a little valve, Jack, thank you. That's right.

MR. MYERS: Saw that core drill a while ago.

MR. GROBE: That's right, that was not a known small leak. (laughter)

MR. POWERS: In order to pressurize this large containment building, we bring in twelve temporary compressors onto the site. And here we show a view of them from one of the upper floors of our office building right adjacent to the containment at the site.

So, looking down, you can see the arrangement of these compressors. They're all taller than we are.

They're pretty big pieces of machinery. And we connect them up with hoses into a manifold. That's that little piece of pipe, white piece of pipe proceeds on into the containment.

At the turn in the white pipe is a silencer for when we depressurize the containment; the air escaping is pretty noisy and it goes on for a period of time while we depressurize all that air.

On the next slide, we show the manifold hooking up all the hoses from the multiple compressors together. Use this to pressurize. As you can tell, this is advanced planning that needs to take place to get this test prepared to go, and equipment to be staged.

And there is a lot of preparation within the plant itself within the containment. For example, the Reactor Coolant System needs to be closed up. All the work needs to be completed on things like reactor coolant pump seals that were being refurbished, valves that are being replaced and maintenance being done on them. Steam generators need to be closed up.

So, a lot of work needs to be prepared. Individual valves need to be tested in preparation. And then every, every one backs out of containment, and any loose equipment is removed, because of the pressurization and depressurization on those.

And, so the organization needs to communicate and work well together to reach this milestone and effectively execute it.

On the next slide, what we show is the pressurization sequence that occurs, as we go through the stages of the Integrated Leak Rate Test. So, to pressurize the containment with all the compressors takes nine hours. Then a stabilization period is a bit over ten hours. The hold test where we take our instrumentation readings is a bit over six hours. Verification that we talked about, with the flow that's introduced through a valve, approximately four hours. And depressurization takes another over nine hours to let that air out of the containment structure.

This was completed on the 9th. And it was completed, I need to add as well, six hours in overall time frame better than the last time this test was done in 2000. This test was done during a refueling outage. So, the organization worked well together to efficiently do this test, and to do it well.

The next slide, some of the Safety Culture attributes that we think were demonstrated through the ILRT activities; preplanning, cross-functional teamwork. You know, as I've described, the engineers need to work to prepare, the maintenance craft workers need to get their

work done as a priority and understand priorities to achieve this objective.

Operations needs to position hundreds of components of valves into the appropriate position to prepare for the test and its successful execution.

Contingency planning needs to be in place for all these steps, in case equipment is not available or doesn't work appropriately. Previous lessons learned from the Davis-Besse site, as well as the industry factored in. We brought in industry experts to peer check us and critique us in our plans prior to the test to be sure we're successful, and that paid off.

Resource allocation needs to be there for all the various work groups, and solid project management dragnets that lay out the logic of how we're going to go through the test and complete it successfully need to be done.

These are a couple of the engineers. The front man is Mike Byer. He's in the plant engineering section of our senior engineers. He is the Test Director. And he's assisted by George VanWert, who is a specialist contractor in this type of test. They were at their computer instrumentation monitoring the parameters during the test here.

As we show here, I mentioned we demonstrated through our data review that the containment continues to be leak

tight, and we had a successful test evolution.

Any question on that?

MR. GROBE: Jim, no question, just a comment. We had two inspectors that spent, well, over about the last eight weeks reviewing test procedures and preparations for this test, and actually witnessed the test; and provided very positive feedback regarding the performance of the test and the quality of the results.

MR. POWERS: Thank you.

Couple of slides here I wanted to touch on quickly. We've talked about many of these significant plant issues that are being resolved amongst our various portions of the presentation in the past meetings, but we are working to keep them in front of us at the plant and in front of the staff, so they can see the effective resolution of longstanding issues and in some cases latent issues at the plant, and what it takes and demonstrate effective resolution of issues. We think that contributes also to the Safety Culture at the plant.

As you can see, for example, I will select a couple of them. Our valve team has worked over 1,500 work items that completed work on 594 valves, 72 remain. That includes things like repacking valves where any leakage was noted. Replacing yokes on valves to get improved material applications. So, a lot of work on material condition of

the plant has been done.

On the next slide, we have noted on the first bullet there, the reactor vessel internal cleaning. Randy mentioned the fuel inspections and going toward competence on our fuel integrity. We also completely disassembled the internals for the reactor vessel at the site prior to putting the fuel in. And backended out and removed all foreign material with a very thorough cleaning. So, that's a real plus of the site going forward for fuel reliability.

We also repaired our reactor coolant system resistance temperature detection ~~faucets~~ bosses that had been a source of leakage in the past, and those were replaced. Completed work on reactor coolant pumps. We're going through our emergency diesel generators and improving material condition there.

We've cleaned the inside of our service water system and made sure it was restored to full capability. We mentioned our feedwater heater 1-6 retubing project. That's also positioning the plant material condition for the future, lifetime of the plant.

Our cranes, we worked on those to upgrade our controls; and also make them removable from containment, so during the operating cycle, that instrumentation can be taken out of containment, so it's not exposed to operating

conditions, and it's brought back in during refueling outages. So, that would keep it in pristine shape.

Finally, a thorough containment cleaning. Going through with a team led by Lynn Harder in our Containment Health Group, completely cleaning the residual Boron that may be there. That's restoring us to a standard that will set our going forward, the staff for future operations.

With that, speaking of Safety Culture, I would like to turn it over to Lew Myers.

MR. MYERS: Thank you.

Today, I would like to talk about three areas, desired outcomes, if you would. Prior to our Mode 5, we completed our second Safety Culture Assessment in-house. I would like to assess you on that.

As you recall, we hired an independent consultant to perform a safety assessment -- Safety Culture Assessment at our plant, and provide you a preview of some of the information that we learned from that assessment.

And finally, then Bill Pearce will brief you on the results of our most recent Safety Conscious Work Environment Survey. You remember, we gave you some information I think last year or something, on the first review. So, we'll give you an update there.

If you go look at our Safety Culture process, we have a business, business practice that we put in place,

1 our assessment for Safety Culture is a very structured
2 process, using that business practice. And I'll give you
3 some, an example of that, that we developed, and to monitor
4 specific attributes and characteristics for each of the
5 these Safety Culture criteria that we identified.
6 We had a two-day meeting. Each manager came in and
7 presented their assessment of their particular area. The
8 criteria for the groups was graded as a group. So, all the
9 men. It wasn't just a guy comes in and says, I think my
10 areas are green. It was a very challenging experience.
11 I think you'll find some of your people monitored
12 this, I believe. We also brought in some of our program
13 owners from engineering our engineering programs; some of
14 our system engineers. Then we went out and randomly picked
15 a couple of our mechanics to also give us some feedback.
16 The management team consensus as a group I think was
17 attained before we finished. Then, once we finished our
18 Safety Culture Evaluation for Mode 5, we go back and from
19 an objective standpoint and look at this criteria, because
20 this is a learning process. We go back and review and
21 redefine the criterias we need to, or add additional
22 criteria. I'll show some examples of that.
23 Next slide.
24 If you go look on this Mode 5 Safety Culture, we
25 assessed ourselves overall as yellow in the Policy Level

1 Commitment Area. I'll provide you some input on that.
2 Yellow in the manage -- Plant Management Commitment Area.
3 I'll provide you some input on that. And finally, the
4 Individual Commitment Area, we also assessed ourselves
5 yellow. So, it's yellow, yellow, yellow.
6 As you see, we added some criteria, the two lower
7 corners.
8 Do you have your pointer?
9 So, in the Policy or Corporate Level Area,
10 Self-Assessment was added and Independent Oversight on the
11 specific criteria for those.
12 And then in the Management Area, we have
13 Cross-Functional Work Management and Communications and
14 Environment of Engagement and Commitment.
15 As you see, these four new criteria, we graded one
16 of those yellow. And we really focused on those areas
17 prior to loading the fuel.
18 The overall assessment, we would say, if we had to
19 look at this assessment as different than we had before,
20 because we had some white areas, and they have shown
21 before, but we would say if we had to assess ourselves
22 honestly, we see an improvement, but what we've seen is
23 criteria is very specific now, and more difficult to
24 grade. And I'll show you that as we go through.
25 So, let's move on to the next slide.

MR. THOMAS: Lew, could you briefly talk about what yellow means for the broad category?

MR. MYERS: Yes, I'm glad you asked that. In fact, I just happen to have our business practice. Green is all major areas are acceptable with a few minor indication -- indicator deviations. White is all major areas are acceptable with a few indicators requiring management attention. Yellow, you get into where it requires a more prompt attention. All major areas are acceptable with several indicators requiring prompt management attention. And then red would be, several major areas and these criteria on the side, do not meet acceptable standards and require immediate management attention.

MR. THOMAS: Thank you.

MR. MYERS: This slide here is an example of one of the pages of this procedure, which I think is 55 pages long. We go through and use this criteria to grade our areas. Some of the stuff is subjective. Some of it is very objective.

For example, if you look at this area here, it's in the individual commitment area, and it concerns questioning attitude. If you look over here at the individual area up here, you'll find a questioning, an area under questioning

1 attitude.
2 If you go back to this original Safety Culture model
3 I gave you, and under the Quality of Prejob Briefings, we
4 have some subjective criteria where we're red, if we see a
5 lot of prejob briefings not going well. If in general, if
6 management observation and QA field observation, so we're
7 also using our quality group observations show that the
8 prejob briefs are generally acceptable, then you would be
9 green.
10 That's sort of subjective, but we can go back, and
11 since our observations are computerized, look at the number
12 of acceptable ones and make a management decision there.
13 You go to the next one where it is more objective;
14 very, very objective. Now, where we say, correct CRs that
15 have been generated by our staff. Now what, those that we
16 have, is our staff, when we find problems, identify those
17 problems.
18 So, if you go look, you say, less than 13 percent of
19 our individuals wrote CRs during the past 30 days. That
20 would be a red issue.
21 Go over here, and you look and say, more than 17
22 percent of our individuals wrote CRs in the past month.
23 That would take us to green.
24 So, that's very measurable. So, you find a
25 combination of questions with some subjectivity in it, and

some others that are very objective.

Next slide, please.

In the Policy Level Area, there is five commitments in this area. Two of the commitments are new. Two were evaluated yellow.

If you go look at our management values are clearly reflected in our business plan and are understood in the organization. That is yellow. I will explain why in just a moment.

Resources, the next area is yellow, was resources are available or can be obtained to ensure safe, reliable operations. We also grade that area yellow. Now. Why was that?

Go to the next slide. If you go look, the 2003 business plan was not approved or was distributed at that time. In fact, it was in the last stages of approval waiting for Bob Saunders' signature. That didn't stop us, because the criteria was that objective, we rated ourselves on; that does not meet that criteria.

Additionally, if you go out and survey our employees, you know, we'll tell you that we're still getting some, we think we show good improvement, but getting some mixed results when we go out and ask about what is Safety Culture and what is the difference between that and Safety Conscious Work Environment; stuff like

that. So, based on that, we graded that area yellow.

Employees are unaware of the Nuclear Performance Index, when we go survey that. What is the status that index right now? That's one of the criteria we measure.

If you go look also at Maintenance, Radiation Protection and Chemistry areas and in Design Engineering Operations, they were yellow based on availability of resources.

If you go look on our plate right now, especially in this first three areas, there is a lot of CRs and activities. Just throwing resources at the problems sometimes doesn't help. And so, you know, we've been working, our staff has been working like 72 hours a week. We've backed off on that. We made some very good accomplishments, but because of that, we grade ourselves yellow.

Additionally, if you go look at our Operations Area, we have continued training on, but we have interrupted our license class, which we are just now putting back in place for next year's exam. If you go look, because of that, Randy talked to you about our staffing plan awhile ago for Operations, and that's a very important area for us. Because we had knocked off that training class, with the outage for awhile, we graded yellow also.

Lack of appropriate section performance indicators.

If you walk around our plant versus our other two plants, you walk down into the different areas, the shop, over in engineering; each department at other plants have very specific performance indicators that support our goals and objectives at our stations, and we monitor those performance indicators, routinely stress the indicators with our employees, and then survey to make sure they have a clear understanding and buy in.

We don't see that at Davis-Besse. In fact, there was no indicator awards in our shops or in operations, stuff like that. We've added that since that evaluation has been done. In fact, we had the tools that we use at our other plants on order for this plant.

We are still not where we want to be though there. We need to have clearly defined indicators that people understand and can relate to. So, we need to continue work in that area. So, that area also is yellow.

Next slide.

Go to the Plan Management Commitment Area, that's the second area that has to do with us as a management team. There is seven management level commitments in this area. I use the word seven level commitments in this area. So, that's the, the areas hanging on the side of the commitment area.

If you go look, four of the commitments, we're

1 assessed as white in this area. Three areas were assessed
2 as yellow. And the overall trend in this area we would say
3 is improving.
4 If you go look, there is, we assessed as yellow;
5 ownership and accountability is evident. We don't think
6 we're still getting the ownership and accountability, I'll
7 explain that in a few minutes, as we should be.
8 Commitment to continuous improvement is evident.
9 Cross-functional work management and communication
10 is also yellow.
11 Let's go to the next slide.
12 So, what is the basis for that? Well, until
13 recently, the site had continual delays on many of our
14 actions. First, you go look, based on self-assessments, we
15 found that the drive for continuous improvement throughout
16 this shutdown has not been evident. In fact, a lot of
17 places where we think we should be gaining margin, we've
18 actually lost margin over the years.
19 Additionally, if you go look at the present time, so
20 that's looking backwards; at the present time, at that time
21 there were a lot of corrective actions and CRs that were
22 past their late date, and paperwork has not been approved
23 by management to allow that to happen.
24 Scheduled hearings was also a problem, in which our
25 indicators were not sure when our scheduled hearings were

anywhere near what we would like it to be. We understand that's why, because we're in an outage now we're planning and designing while we're in there, so that schedule here, we typically spend up to 90 percent ranges, much lower than that.

Identify lack of trust in several areas still exist. If you go look at the messages that we get from our employees, sort of a wait and see attitude on the future. In fact, you know, you know, making a lot of good changes now where we continue to go forward. I think we want to demonstrate that until we get our business plan very visible, we'll demonstrate those, we'll continue to go forward after startup.

Almost all of our employees developed plans-- or were overdue at that time. What we do is we evaluate our, our people each year, and then have a developmental plan. And this is a first time we've done that as the management team here. And, at the time we did this assessment, they weren't complete.

So, it's just they weren't completed, they graded yellow. Didn't say, by such and such a date. We actually completed them on the time we agreed to from a management perspective, but they weren't complete.

Then, contract training qualifications are a concern. We talked earlier about the amount of work we're

1 seeing with some of the contractors, how Randy brought in
2 and I brought in some specialty contractors on the, on the
3 containment air coolers, you remember, six people.
4 Jack, you talked about that.
5 And then containment, some of the rework we had on
6 the polar crane that we talked about on a meeting earlier.
7 So, those are the reasons some of those areas wind
8 up, those commitments wind up being yellow.
9 Now, if you go down in the individual area. In the
10 individual area, there is five commitments on the side
11 there. One we rate as green, one white, and three
12 yellows.
13 From a yellow standpoint, drive for excellence -
14 nuclear assets of people and plant are continuously
15 improving to enhance safety margins.
16 The next area was rigorous work control, a prudent
17 approach to performing activities in a quality manner is
18 the standard.
19 Nuclear professionalism. Persistence and urgency in
20 identification and resolution of problems is prevalent. If
21 you go look at that area on the next page; overall the
22 quality of our prejob briefs is white, and green for
23 critical evolutions.
24 But remember awhile ago we told you about those
25 routine prejob briefs? If you go look at the performance

indicators we showed you last month. If you go look at the amount of coaching between supervisors and management, management is finding many more coaching opportunities than supervisors. Quite a big delta there. We need to monitor, to bring those two things in line, or at least understand them better.

We need to put resources on procedure change backlog. We've done that. When we look, when we were doing our assessment, the number of outstanding procedure changes we had sort of surprised all of us when we went through that group review. And so, we decided to throw some resources on that and try to make sure we get these procedures in good stead prior to restart.

Additionally, if you go look at our rotating equipment is a major rework challenge. We've had several problems with, where we rebuilt some of our rotating equipment and had problems with it.

Then there is also some deferrals. Many of our plant components are not working and we have to do preventative maintenance on our components, which you can't do it with the mode we're in. So, there is PMs waiting deferral, and we need to defer those. So, that was a paper issue that we hadn't got them deferred. There was like 72 ~~OPMs~~ PMs that had not been properly dispositioned, and then, at that time.

And then personal initiative and ownership, we also said was yellow. In fact, ownership to complete the job is a weakness specifically in the maintenance area. We don't, still don't see the ownership that we would like to see in the maintenance area, get jobs done.

If go back to the next slide, you see the Safety Culture Assessment that we did. I would like to take a moment and just give you some thoughts from the independent review, that we had the correlation there.

Under long term areas for improvement, we noticed several areas where safety is recognized as a value in the organization, but it's not consistently understood. You know, that's pretty much the same thing we noted too. So, that's in the independent report that we saw.

And one of the things, we talked about ownership awhile ago. Individuals readily accept responsibility to take ownership of problems, but others, some individuals do, but others are still reluctant to do so. So, a good correlation there.

And, an integrated and cohesive organization on safety, leadership process does not yet exist. And what we mean by that, is if you go look at our, our process to make sure that, that safety issues are identified like in prejob briefings, you mentioned prejob briefings and operations awhile ago; we have a structured approach that ensures

1 those safety related activities get talked about on a shift
2 basis. And, you really doesn't find that in the turnovers,
3 so we're going to add that.
4 Prejob briefs for critical evolutions was another
5 area noted in the independent assessment report. From a
6 management standpoint, a manager perceived that attention
7 to safety is valued in the organization, more than
8 nonmanagement personnel. Remember that I told about the
9 delta that we saw between some of our work force and our
10 perceptions. That was noticed in the report.
11 Station personnel expressed a number of concerns
12 about continuing FE support, FirstEnergy support, that is,
13 for restart efforts and ongoing support after restart.
14 That's sort of the same issue that we found. And, you
15 know, if you go look at our business plan, that not being
16 out of clear expectations for the future, we thought is one
17 of the main issues there, that would help resolve some of
18 that at the present time.
19 Activities related to ensuring that sufficient
20 number of personnel necessary and knowledgeable --
21 necessary, knowledgeable skills and abilities are and will
22 be available to conduct work at the station have been
23 stopped during the outage. Once again, that gets back to
24 some of the training that we have stopped, but we are
25 restarting now. And Randy talked about the Operations

Training that's restarted.

Under ownership and accountabilities. Owning the problem until it's resolved. Maintenance groups scored significantly lower than other groups.

In the nuclear professional area, many personnel did not see evaluation process as tied to professional development. You know, we would say that too, we've not effectively used our professional development plans as well as we should at this station.

Then under drive for excellence. Timeliness of issues, issue resolution is problematic and must be improved. That's that drive to find and fix problems. We're pretty good at finding the problem, but we're not as driven at fixing the problems as we should be. In fact, even today, if you had to ask us as a management team, we'd tell you that there are probably some things that we found last year that we think we should have fixed by now; in my opinion anyhow, that haven't been fixed.

Personally, I can give one specific example, I looked at the other day, going to go do some insulation for the turbo charger on the diesel. And you know, I thought that would have been done by now, but we still don't have it done. So, I'm sort of disappointed on that.

So, just in summary, if you went in and looked at the independent consultant report they wrote and looked at

all the issues they found, there is a bunch of positive issues. I gave you a lot of negatives today. But, in my mind, it was a very good correlation in that report, and in some of the areas we assessed ourselves in. There are also some areas that are there, that we even need to look harder at as we go forward.

That's all I have, thank you.

Oh, yeah. You know, we have a public meeting in a few weeks, where we'll go through the entire report and the actions taken. I thought I would take today's opportunity to just wet your appetites some.

MR. GROBE: Appreciate that, Lew.

I have a question or two and a couple observations.

Could you go back to slide 49, please. There you go.

I just wanted to make the observation, two observations on this. One, is that I'm not aware of any other plant in the United States that has this kind of a process. The procedure that you were referring to has about roughly 50 pages of tables like this, on every one of these attributes.

MR. MYERS: Right.

MR. GROBE: And the NRC has no requirements in this area. So, with respect to these

thresholds or even what areas, what attributes you're looking at, there is no guidance or requirements that the NRC has promulgated in this area. So, it's particularly noteworthy that you folks have taken this on with a certain amount of vigor. You earned the opportunity to develop this procedure.

MR. MYERS: Right.

MR. GROBE: By creating a fairly highly risk significant situation from a bad safety culture. So, it's, I wanted to make the observation that this is an area that is somewhat cutting edge, and clearly the NRC has no requirements in this area.

It makes the evaluation of this more challenging for us. Clearly, it's an area that we need to be confident is adequately restored for safe operations prior to the NRC's authorization for restart, but it's a uniquely challenging area; and to that end, we put together a fairly impressive, I think, team of folks, six folks that are in the midst of an inspection of this.

Again, a couple of weeks ago, in late March, when we received the first report from your outside consultant, there were three of the team members there for the presentation of those preliminary findings; and continue with all, five of the six folks on site last week, and several more weeks of inspection coming up.

1 That team includes a broad spectrum of folks,
2 including people with 20 or more years of experience in
3 doing these kinds of evaluations, organizational
4 effectiveness, Safety Culture, which is just a term of art
5 type of evaluations; as well as two former industry
6 executives who personally had proven track records in
7 recovery of poor organizational performance.
8 So, it's a robust team that's going to be taking a
9 very hard look at this and evaluating the approach that
10 you've taken.
11 I had one question. It concerns the individual
12 areas; on one of your slides you indicated -- I'm getting
13 my pages mixed up here, but you indicated that you had a
14 two-day meeting with all of your managers, and you looked
15 at this process and applied it on each work group.
16 MR. MYERS: Right.
17 MR. GROBE: And when you rate
18 an area as yellow, in an individual attribute, whether it's
19 ownership or accountability of the individual or plant
20 management level or something at the individual level, I
21 would imagine that there is a spectrum of performance in
22 that area across different work groups; is that correct?
23 MR. MYERS: Absolutely.
24 MR. GROBE: So, if you rate
25 someone as yellow, there could be some work groups that may

be green in that area and other work groups that may not be so good, may be red in that area; is that correct?

MR. MYERS: Well, for example, right now, we think pretty highly of the progress we're making in Operations, but you go look at Chemistry and HP at the time we did this, there was a lot of questions to be answered. So, that's absolutely correct.

MR. GROBE: Okay. Could you describe just briefly, then we'll move on to Bill's area. Could you describe briefly what your restart criteria is in this area that you currently identified?

MR. MYERS: Yes. I have that with me, as a matter of fact. We would expect to see, what we would define ourselves as a positive trend in Safety Culture, for restart and improving Safety Culture trend. Every area assessed must be, must not, they don't have to be white or green. Some areas may be yellow. But we would not expect to see reds. Okay? So, in general a positive safety trend with no major areas being red.

MR. GROBE: Could you back up one slide, please?

So, what you're talking about is the central areas with the blue arrow?

MR. MYERS: That's correct, yes. And I would tell you, once again, you have to look at

each area in what you're doing. Like the readiness for Mode 4 will be different than the readiness for Mode -- for fuel load, okay. So, each one, it takes a lot of management attention to say, are you, the question is, do you remember, I hate to use the Challenger event, but why should you go forward. And that's what you should be doing when you do this.

This is just another management tool I'm very excited about. If you want to be a good manager, this may help you some in being a good manager in helping you understand what's going on in your organization, so I'm pretty excited about this tool myself.

MR. GROBE: Any other quick questions?

MR. MENDIOLA: I have two questions. Question number one; any new program is implemented or used, if you will, in response to any of these areas, obviously, when assessed right out of the box can't be green, probably is red, even white, probably starts out as yellow the first time it's assessed. And, clearly, you would hope that the program would turn around and eventually work its way toward green.

MR. MYERS: Right.

MR. MENDIOLA: But understanding that, has there been any area or any program that you've

implemented that has been, if you will, certainly frustrating to your organization, has been remaining yellow longer maybe than you wanted it to, through the assessments that you made?

MR. MYERS: Well, there is two or three programs that come to mind right now that are, we are, I would think of also. One would be the quality of our licensing information. I feel fairly good about that presently, but from looking back, making sure that our licensing information has good quality.

And, the other program would be our Corrective Action Program. You know, we wrote, I don't remember how many thousands it is, ten thousand or so CRs, you know. It's a massive number of CRs. And as I just heard right here, walk down the entire plant. And then to deal with all that is complex and difficult, you know. But it's a huge, huge task; and, especially when each CR generates about four corrective actions on the average.

So, keeping up with all that, and tying stuff together properly, and getting through this process with a good Corrective Action Program, I would say it's probably the most frustrating thing that I've tried to do in my career.

I believe that our Corrective Action Program got us into this, and it's got to help dig us out. So, we really

use the Corrective Action Program for every one of the Building Blocks. It would have been easy just to write work orders or work requests or blanket work orders for all that stuff in containment. We wrote CRs and CAs, and now we're in the process of closing them all out, and it's time consuming. But it's, I still believe it's the right thing to do. That program comes to mind.

MR. MENDIOLA: The second question, of course, is maybe a little unfair.

MR. MYERS: This never stops.

MR. MENDIOLA: Obviously, FirstEnergy has other units in it. Both Perry and Beaver Valley are faced with major evolutions in the coming year, outages, and so forth.

MR. MYERS: Right.

MR. MENDIOLA: Has this been applied to those units as well, the assessment methodology? And the reason I ask that, is to determine if there is any feedback from their use of this methodology as applied to Davis-Besse?

MR. MYERS: We have not applied that at this time. They're familiar with the process. They've looked at it. They've sort of assessed theirself for Safety Culture, but nothing to the degree that we have over here. And, that's because we're piloting

the program.

Once we get the program through the restart, we're going to turn it into some kind of nuclear operating procedure and look at it across our sites. But we have to perform assessments of Safety Culture at each one of our sites, but nothing like we've done here. Okay?

MR. MENDIOLA: Thank you.

MR. GROBE: Bill, we have several more slides to go, and I don't want to leave off either any of the three topics we have left. You've certainly got a tremendous amount of data that you're prepared to present. I think it's important that the public have an opportunity to see this data. Many of us have already reviewed this information.

So, if you could just kind of get through your presentation while covering it, but do it a little bit spritely, I'd appreciate it.

MR. PEARCE: No problem.

What this is about, my section is Safety Conscious Work Environment Employee Survey.

As you remember last August, we did a survey. And this is the next one now. It was, this one was conducted March 26 through the 28th. We actually, this survey, we got good response out of it. It was a voluntary participation survey; and out of 1448, population of 1448,

we got 1138 responses. There were 36 questions on this, which 26 were the same as the August 2002 survey.

And we kind of structured it around the four pillars. So, the next slide, shows you the four pillars. And all that does is shows you the number of questions at top that cover each pillar.

Next slide.

I'm going to go through some of these and give you some examples. This is the way this thing set up. You can flip through it yourself and look at it. You see August 2002 is on the left, the result and then on the right is the March survey we did this year.

And this question; "As a nuclear worker, I am responsible for identifying problems and adverse conditions." We had 98 percent positive result in 2002, and in 2003, we went to 99. So, I'll go through a few of these and skip through some of them.

Next slide.

The question was, "If I had a nuclear safety or quality concern, I would raise it." We got a 98 percent positive response. We didn't ask that question last year.

Next slide.

You see, "Management's expectations regarding safety and quality are clearly communicated." We had a 55 percent response in 2002. And now we've gone to 89 percent

positive response. And then the one on the right, we didn't ask this question in 2002, but we got a 63 percent positive response.

Next slide.

"My first line supervisor/foreman addresses concerns brought to his/her attention." And last year, we got 61 percent positive response. This year, we got a 90 percent.

Next one is, "Management is willing to listen to your problems." We got 63 percent positive response last year. 82 percent this year.

Next slide.

"Constructive criticism is encouraged." Went from 53 last year to 76 this year.

"I believe my management cares more about identifying and resolving nuclear safety, quality, and compliance issues than cost and schedule." I think this is an important one here. You look at our root cause. We almost doubled it, or we had a large increase there. It's still not as good as we would like to get it. I'll talk about that at the end, but we got a very good increase on that.

MR. GROBE: Bill, just a quick question. Both of these surveys were only permanent plant employees; is that correct?

MR. PEARCE: No, this was all employees at the site. And at the end, I'm going to break that down a little bit. I'll show you something with that.

MR. GROBE: Okay.

MR. PEARCE: Okay, Slide 66. The next one is, "I know how to write -- didn't ask this question last time, but we got good response on both of the these, as you can see. Just go on to the next slide.

67. "I felt free to approach management regarding any nuclear safety or quality concern." You see the improvement there.

"I believe I can raise any nuclear safety or quality concern without fear of retaliation." We got a good improvement there.

Next slide.

69, "Identification of potential nuclear safety/ nuclear quality issues through the Condition Report process is effective in our organization." Went from 57 to 80.

"Resolution of potential nuclear safety and nuclear quality issues, including root cause and broader implications, through the Condition Report process is effective in our organization." We went from 45 to 74.

And again, I think --

(Discussion off the record - confusion of slide numbers.)

MR. PEARCE: Now 69. "I am aware of the Employee Concern Program and its purpose." We didn't ask those two questions. We got good responses.

So, now we're on 70? 70 is, "I believe issues reported through the Employee Concern Program will be thoroughly investigated and objectively dispositioned." We got 77 percent positive responses.

And, "I believe that Employee Concerns Program will keep my identity confidential at my request." We went from 66 to 76.

Then 71. "I believe that upper management supports Employee Concerns Programs." We went from 60 to 80.

And the next slide, 72. We didn't ask either one of these questions. "I'm aware of FENOC Safety Conscious Work Environment Policy." 96 percent.

"I am aware of the Safety Conscious Work Environment Review Team and its purpose." 82 percent.

73. "I believe my work environment is free of harassment, intimidation, retaliation and discrimination." We get a, 2002 we're at 67. We went to 77.

And then the last slide, in August of 2002, this is the question, "Within the last six months, I have been subjected to HIRD for raising" -- that's harassment, intimidation, retaliation and discrimination -- "for raising nuclear safety, quality or compliance concerns

while working at Davis-Besse." And, you can see that we went from 2002, a positive response of 7 to that question, to 8 in 2003.

And, "I am aware of instances that occurred in the last six months in which workers in my work group have been subjected to harassment, intimidation, retaliation and discrimination for raising nuclear safety, quality or compliance concerns." And we went from 12 to 15 percent.

But look at the next slide. Go to the next slide. This is, we segregated this to FENOC only, because a training, the training that we have done, we focused on training FENOC supervisors and management and FENOC employees. And this was the same questions when you break out FENOC only. And you can see here, we went from a nine percent in August to a five percent in March for those same two questions we asked previously. And from an August question about, I am aware of instances in which that's happened; we went from 15 percent in 2002 to 10 percent now.

So, where we've trained people and focused, and they understand what the issues are, we saw the expected improvement in this area.

So, let me give you some feedback that we got. Lew presented the results to our employees at an All Hands Meeting. And on these two questions, they were, they said

they were confusing questions, and they were reversed in logic. In order to agree with it, you had to answer on the other side of the page. And they believed that that kind of stilted the results for some, in some manner.

So, I'm not trying to tell you that we don't believe the results. We do believe the results. And we know that we have some issues there. But we've shown, where we focused and people understand Safety Conscious Work Environment, we've gotten the result that we expected to get there. We're seeing improvement, and so, overall, I think we've got a positive result.

And in fact, if you look at the entire survey -- go on to the next slide.

MR. MYERS: Wait a second. There is like over a hundred people in the room where I did this. When I got to this question, I tell you, before I got through that, I felt like I needed HIRD, you know, because they were about to attack me. They said, this question was not a good question. It has a double negative in it. Some misread it. They were actually hollering in the audience. So, there was a lot of push back when I got to this one question about our employees.

So, it does give us some feedback having that many people in the room and listening to them. So, I'll share that with you. It's sort of interesting.

MR. PEARCE: So, let's go to the last one. So what, from the survey --

MR. RULAND: I have a question about the survey design You've chosen a scale of disagree, agree, don't know.

MR. PEARCE: Right.

MR. RULAND: Can you tell me why you chose that scale? You know, I read some of these questions, and you know, there is some that, you know, I could imagine an employee saying, well, I kind of agree with that, or I might not strongly agree, but I agree.

I'm interested in why you did this survey design the way you did? Not using a five point scale, you used a three point.

MR. PEARCE: This is a standard survey we did. 26, or I don't remember the number to give you an exact number, but there is a number of these are our standard instruments that we use. It's all in the industry. It's the same survey given across the industry. So, it gives us some way then to compare ourselves to other plants in the industry and see how we rate. That's the reason.

The majority of the questions, I believe there is 21 that are the standard questions. Don't hold me there, but I believe that's right. So, we tried to stay in a standard

format.

MR. RULAND: So, you used this foremat because you could compare it with the industry. Could you speak a little bit about that, about that comparison, if you did it?

MR. PEARCE: Well, we just got the survey, we just got it back, we have to go do that now. We just got the results out in the last few days.

MR. MYERS: This is pretty hot off the press.

MR. RULAND: All right.

MR. GROBE: Could you go back to 75 for a moment?

MR. PEARCE: Certainly.

MR. GROBE: It's easy for you to say that, certainly. She's over there trying to find 75.

What's the relationship between the number of contractors that may have taken this survey as to FENOC employees?

MR. PEARCE: I can give you those numbers. I have it right here.

MR. GROBE: It doesn't need to be precise. Is it like three times as many, five?

MR. PEARCE: There were 1138

total, 665 FENOC, 377 contractors.

MR. GROBE: Okay.

MR. MYERS: And the way we did this, we got what is it, 79 percent?

MR. PEARCE: 79 percent I think was the number.

MR. MYERS: So, it's not a low population, it's high population.

MR. GROBE: So, in rough terms, there is about twice as many FENOC as local contractors.

MR. PEARCE: That's correct.

MR. GROBE: I'm not real quick to dismiss the data out of hand. I understand there was some questions. But, some questions on the interpretation of the question.

MR. MYERS: Right.

MR. GROBE: But let's just take the last question on 75.

MR. MYERS: Okay.

MR. GROBE: You had in March of 2003, looking at the total population, you had 15 percent saying yes. If, if I understand that correctly, ten percent of those, the FENOC employees said yes. I believe what that tells me is probably 25 percent of your

contract employees said yes. To get an average of 15.

And that, I'm troubled by that. I think, I'm curious as to whether or not you're going to spend a little more time looking at this data and trying to decide whether you're going to need to do some additional evaluation in this area. I might have caught you cold.

MR. PEARCE: No, 16.4 percent of the contractors.

MR. GROBE: I think I need to look at the data some more then. Because I'm not sure how you get an average of 15 with 16.4 percent for one third of the population and 10 percent for two thirds of the population. That tells me that that should be down around 11 or 12.

MR. MYERS: I think you're right.

MR. GROBE: I'm not a great mathematician, but I think it makes sense.

MR. PEARCE: I have the numbers here. You're welcome to look at them all, Jack.

MR. GROBE: I think this area needs to be looked at. Okay? Good. Let's move on.

MR. MYERS: We gave you this so quickly. We just got this data this week from our employees, so it's very, we haven't really analyzed this

yet.

MR. PEARCE: Let me tell you one thing. I don't want this to come across defensive. I agree with you, we are going to do something with this. We are going to continue to do something with it, as we have our own employees. We need to focus more in the contractor area in some of these. And we've gotten some success out of the FENOC area. Now, we've got to focus more on the contractor area.

MR. STEVENS: I was going to say --

MR. PEARCE: Well, let me finish, Mike.

MR. STEVENS: Sorry.

MR. PEARCE: The issue that I want to tell you about is, what's happening is, with this question, is when folks haven't been trained on what is a Safety Conscious Work Environment, what is a safety issue; what you get a lot of, I read some of the responses back from the last one and this one; and what you get a lot of is people responding to their relationship with their management.

If they feel like they've been harassed about their work, it's really not got anything to do with safety issues necessarily, but in their mind, that's a harassment,

1 intimidation, retaliation; and I believe that, in my
2 belief, is that's what's driving a lot of this question.
3 Because it even disagrees with some of the other earlier
4 survey where we asked some similar areas and we get a good
5 result. And then we get to this particular question, and
6 we get a bad one.
7 So, there is some confusion. Like I said, I'm not
8 trying to discount or throw it out or anything, but there
9 is a confusion with it.
10 MR. GROBE: I apologize. I
11 think I interrupted before you got to your conclusions.
12 MR. PEARCE: Okay. Conclusion
13 is, I think we've got significant improvement in the
14 majority of the questions here. And those that you're
15 asking about there are the ones we don't believe that we
16 got the improvement that we would have liked to have
17 gotten. And we're going to have to study those further, as
18 you said.
19 We think that they're is still, the survey tells us
20 that there is additional work demonstrating management
21 commitment to Safety Conscious Work Environment, to
22 continuing to improve confidence in the Corrective Action
23 Program, and to continue to improve confidence in the
24 Employee Concerns Program.
25 That those are areas that our survey has told us

that we may have, even though we may have improved in them, those are areas we still need to drive on to get better results out of. And, we're going to continue to do that.

MR. GROBE: Could we hear some more on this one, this last area next month?

MR. PEARCE: Sure.

MR. GROBE: I'm sorry. Let me be specific. The area I'm talking about is slide 74 and slide 75.

MR. PEARCE: I understand.

MR. MYERS: Mike.

MR. STEVENS: Are you ready to go on to my slides?

MR. MYERS: Is there something you have quick you were going to add?

MR. STEVENS: I think having it at the next meeting would be good. We are doing some stuff in that area, but we'll get it all wrapped together.

Could we have the next slide.

I want to talk today about our progress towards Restart in three areas; Major Milestones, Integrated Schedule and show you some Performance Indicators that we're using to track our outage work activities.

Next slide.

I'm not going to go through a list of things we're

making progress on. It's similar to what we've already previously presented.

We are preparing for the Mode 4, Mode 3 pressure test. It looks like that's going to be mid to latter part of May. And then startup is about a month after that.

We're pursuing all of our options with the high pressure injection pump to support that in the schedule.

Next slide.

This slide shows the total number of activities in our outage schedule. The top line is the total number. The middle green line is the number of activities completed. And the bottom blue line is the to go. This is to give you a sense of how many work activities we're accomplishing here.

MR. GROBE: Those lines across the bottom are weeks?

MR. STEVENS: Yes.

MR. GROBE: The to go line looks kind of flat.

MR. STEVENS: Well, it's been offset by the increase in activities with the constant work-off rate.

MR. GROBE: Okay.

MR. STEVENS: Okay. And part of the reason for that dip in the first peak, is when we did

our scrub and definition of the work that we needed to do, and generated some additional Condition Reports. As the Condition Reports got evaluated, the corrective actions came, out which we were anticipating.

Next slide.

This is Containment Health, Condition Report Evaluations. You can see how much progress we've made; the number of closed and the number remaining open.

Next slide.

Here's the Corrective Actions that have come out of those Condition Reports.

Next slide.

This is our System Health Restart Condition Report Evaluations. Made good progress there. Had quite a few evaluations to complete. Doing that pretty well.

Next slide.

Here is the Corrective Actions. So, we're integrating these Corrective Actions into our schedule on a system basis to support return of the plant in the right sequence; to operations, perform testing and startup.

MR. MYERS: What's interesting here, if you look at this line, we don't close, in our process, we don't close a CA out until the work is complete. So, this actually reflects completions in the field too. Okay?

MR. GROBE: Good.

MR. STEVENS: Next slide.

This is our On-Line Corrective Maintenance Backlog. You can see we're not coding them for on-line, or filling, by way of corrective maintenance.

Next slide.

In summary, I think we're making good progress. We're moving towards restart. High pressure injection pump, electrical distribution remain challenges in that we haven't fully defined that yet. We continue with our readiness meetings. And like I said, I believe mid to latter part of May, we'll be doing pressure testing, with startup about a month after that.

MR. GROBE: Okay.

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

MR. PRICE: Thank you, Mike.

I would like to complete our presentation today by giving a high level overview status on our 350 Restart Checklist items and also our overall Restart Actions.

Next slide.

This is the Restart Checklist items that were discussed earlier in the meeting. This is at the beginning of those; checklist item 1 and item 2 are on this graph. And the color coding, I can explain real briefly. Green

means we're completed with that particular item. The brownish color is a not applicable item. The light blue color is something that is progressing, however it's waiting on plant conditions for, to be able to proceed further. And then the darker blue or purple, whatever color that actually is, are activities that are actually progressing right now.

In the 1-Bravo area, which is the Organizational/ Programmatic and Human Performance Issues. We have one item left in the discovery area, in that particular checklist item. That is an engineering assessment that is going on right now, and we'll be completing this week and is going through our Corrective Action Review Board tomorrow for final review. So, that should be cleaning up. And that will be our very last discovery item relative to our implementation action plan or our 350 checklist items.

The reactor vessel, reactor pressure vessel head replacement is light blue right now. That's waiting for full temperature/full pressure tests on the Reactor Coolant System.

We have our ILRT completed, which is in the 2-Bravo area. We're showing 99 percent there. That's in our containment vessel restoration. Following the head replacement, the Integrated Leak Rate Test was the final

activity in that area, however we have a few local leak rate tests to finish up and that will go one hundred percent complete.

We talked before, Randy Fast talked about the activities going on in Containment, which is in the 2-Charlie area. We're making good progress there. Are getting ready to complete most of those activities by the end of the month.

The containment emergency sump, we spoke about earlier. The installation of the sump is complete. We have a few minor work items, so we're not reporting a hundred percent yet there, but it's close to completion.

And we have some work yet going on in the auxiliary building in boric acid systems that are outside the containment structure with continued cleaning and inspection. And that has left inspections going on there that should finish up shortly. So, we're making good progress in that section.

Next slide.

The next slide is our Safety ~~Secure~~ Significant Programs that are on the Restart Checklist. I would like to talk about our progress since last month.

Since last month, we have completed the Corrective Action Program; both the discovery and the implementation activities. The Operating Experience Program has also

completed its implementation of its corrective actions. Our Quality Audits has completed the discovery plan and is well along the way and near completion of the implementation of corrective actions.

And another change, well, we've had the Radiation Protection Program Inspection Program Exit this morning that was discussed earlier. We still have a few corrective actions to work off there, and, but we're making good progress.

And then the very last checklist item that we have, the one at the bottom, which is Completeness and Accuracy of Required Records and Submittals to the NRC. We're progressing on that. We have an implementation action planned now defining all the activities that we'll do to address that, that checklist item, and we're progressing on those.

Next slide. Final slide for the 350 checklist items. We're making good, continue to make good progress on Adequacy of Organizational Effectiveness and Human Performance. That's the first item up there. Continue to work off our corrective actions in the improvement plan.

Another area moving down, we are now progressing, showing progress on an implementation activity associated with the Systems Readiness for Restart. We've added this previously. We were showing Restart Readiness Reviews in

that area. This now shows a percentage complete relative to the Condition Reports and Corrective Actions that have come out of the System Health Readiness Review Process through the System Health Building Block Plan.

And the one right below that, Design Calculation Resolution. We completed the discovery activities associated with that checklist item, and the implementation and corrective actions are included in the line up above it.

Then the last one I would like to speak to is Test Program Development and Implementation. Again, the Integrated Leak Rate Test also fit into the line item. But again now, this particular checklist item is on hold and will be progressed further when we do our Mode 3 pressure test.

MS. LIPA: Clark, do you have the number for that? I can't quite read it.

MR. PRICE: 66 percent.

MS. LIPA: Thank you.

MR. PRICE: So, if there is no questions on the Restart Checklist. We're making good progress. And this now transitions to our overall restart actions, which include the 350 checklist items, as well as items that we identified through our criteria that we've developed that we want addressed and completed prior to

restart.

This first draft shows the Condition Reports that we've discussed a lot about Condition Reports today, which we generate whenever we have any issues identified through any of our Building Block Plans or any other normal day-to-day activities, we generate Condition Reports to address those issues and drive resolution.

Mike Stevens referred to this a little earlier, this was bulk work that was in the schedule. This Condition Report Evaluations, you can see we're working down. We have 96 percent of the evaluations completed on Condition Reports that have been identified to-date. And, we have still 300 plus Condition Reports to, they're still in evaluation.

What I will say though, last month I talked about this, and I said that number should be worked down to about the hard remaining few. There is about a hundred in that number that's still remain from the Building Block Discovery Activities that are the ones that have emerged and we've talked about today as a number of the issues that we have.

The additional 250 roughly on that are continuing activities that we have day-to-day as our normal process during the outage of identification of issues that we want resolved, at least evaluated prior to restart, to determine

whether we want to implement any corrective actions associated with those.

So, there is an ongoing process. Like I said, since the last public meeting, we have added 250 Condition Reports to this population.

MS. LIPA: Clark, when you talk about prior to restart, are you talking about Mode 2 or Mode 1?

MR. PRICE: I'm talking Mode 2.

What this curve also has on it are a couple of projection lines. Based on work-off rates that we've had over the last four weeks, we do a couple different projections based on the average over the last four weeks, and the best we've seen that we have performed in the last four weeks; and that puts us out into the middle of May time frame for completion of these Condition Reports.

Again, our process continues to add Condition Reports to restart if the Restart Station Review Board determines it necessary, but right now, based on the work-off rate, we should be completed during the middle of May.

The next graph, our Restart Corrective Actions that come out of those Condition Reports. Again, showing what we have left. We have currently 1600 roughly Condition

Reports or Corrective Actions remaining that have been classified as restart. That's down from almost 2600 that we had last month at this time.

Again, we have a projection rate here based on our work performance that would put us out into the first or second week of June at the current work-off rates we've been experiencing.

So, we feel that both the Condition Reports and the Corrective Actions, and the work-off rates that we've been able to maintain and achieve fit into our restart schedule and continue to support the milestones that we have in our restart plan.

Any questions?

MR. GROBE: Nope.

MR. PRICE: Okay.

Okay, Lew.

MR. MYERS: In closing, you know, we were pleased with the exit today that we had in the Health Physics Area. As I said there, Health Physics is something pretty unique to our industry, so being on the 350 list in that area is not something I was excited about. But we were pleased with the exit that we had today. I will tell you that.

We're pleased with the progress that we've made this month in the Integrated Leak Rate Test. The work

continues. A lot more work ahead of us, we know that.

Corrective Action Evaluations are being completed, as that graph shows. The corrective, the Corrective Actions are also being completed. Many of the improvements have been made in our plant, and not only from a program standpoint, our Leak Rate Program, FLUS, seals, we've shown a lot of those things today, that we believe even in our containment for this age of a plant would probably be an extremely clean containment when we start back up.

Two issues of concern are still upon us, if you will. The HPI pump, I think, is our big issue for us; and the Safety Culture is something that we got to continue to take actions on, strong actions.

We're getting ready, I will tell you, to take some actions, which you'll hear about in the next public meeting, that will ensure that we have the right resources in these areas also. You know, so we're going to be doing some things to really focus, it take some management time, especially in the Safety Culture area.

Mode 4 is important to us. It's our next milestone. We understand we have to meet that safety evaluation, get that complete to get to Mode 4. So, that's very important to us and we're working hard.

I thank you for your attention today.

MR. GROBE: Okay. Thank you

very much.

Why don't we just take a couple minute break while we reorient ourselves and open up for questions from the floor. Okay.

(Off the record.)

MR. GROBE: This is the time of the meeting when we give an opportunity for any members of the public or other interested folks to ask questions, and we'll attempt to respond to them. Christine and I will field questions today.

I'm not sure if we have members, elected officials or local representatives that are still present, but if they are, I would like to give them an opportunity to go first.

No? Tonight. Okay.

Any other questions or comments anybody would like to make?

MR. KERFF: My name is Joe Kerff. I live in Ohio. I have a property on Lake Erie. And, I have been traveling to Lake Erie Islands for 35 years. And, I'm a metallurgical engineer. I'm on the Board of Ohio Citizens Action. And I hosted a Chernobyl child for a couple of summers because of a nuclear event that happened there.

When I look at these statistics and the presentation

on slide 73, Conscious Work Environment Employee Survey. In March of 2003, it says that twelve percent of the employees think they're going to be intimidated if they become whistle blowers, and eleven percent don't know if they're going to be intimidated if they become whistle blowers. To me that's 23, nearly a quarter of the total work force hasn't got it yet, even though there was a Chernobyl-type event that nearly occurred on the shores of Lake Erie.

And I don't understand that. I'm very uncomfortable with that statistic, that there is still a great number of people who work at the plant, that think that if they do the right thing, that there is going to be retaliation.

MR. GROBE: Appreciate your comment. I think that's some of the same sentiments that were expressed during the course of the meeting. I believe this survey was just completed within a week or so.

Where is Bill Pearce?

MR. MYERS: He's gone. He's left.

MR. GROBE: Oh, he left. I think it was just very recently that this survey was received. Randy?

MR. FAST: Two weeks.

MR. GROBE: About two weeks

ago. And FirstEnergy has been in the process of data reduction and trying to figure out what this data means.

Likewise, I believe the number Bill told me before he left was about 22 percent on that one specifically that I was asking about, 22 percent of the contractors appeared to be saying that, that they had some concerns about harassment, intimidation, retaliation and discrimination.

One of the challenges in this area are separating folks that are concerned about working conditions and translate that into other concerns or whether they're truly concerned. And we asked FirstEnergy to get into this a little bit more deeply and try to understand exactly what that data is telling them, and report out at our next monthly meeting.

So, I think your observation is a good one. It's one that we share, and it's something that we need to look at. So, appreciate that, thank you.

Other questions or comments?

Did I get a timid group this afternoon; or are you just all satisfied, or hungry?

MR. KERFF: Can I have a follow-up question.

MR. GROBE: Sure.

MR. KERFF: Who at the NRC will ultimate have the responsibility for signing off at

Davis-Besse?

MR. GROBE: The question was, who at the NRC will ultimately have responsibility for signing off at Davis-Besse. I assume by signing off, you mean authorize to restart.

MR. KERFF: Allowing it to restart, sure.

MR. GROBE: The panel which I chair, and most of the members of the panel here today, has the responsibility to make a recommendation to the senior executives in the NRC, ~~and~~ in the reactor program, two people in particular, as to whether or not the panel believes the plant is or is not ready for restart. And, when the panel is convinced that it believes the plant is ready, we'll make that recommendation and not before.

We make that recommendation to my boss. His name is Jim Dyer. He's the Regional Administrator in Region III, which is in Chicago. And, he consults with two people. One is the Director of the Office of Nuclear Reactor Regulation. He's the individual that has responsibility for safety across the entire country. Jim has the responsibility here in the midwest. And the other individual is the Deputy Executive Director for Reactors. That's Sam Collins' boss. His name is Bill Kane.

So, those are the three individuals. Jim Dyer has

the ultimate responsibility, consulting with Sam Collins and Bill Kane. And he wouldn't even consider the question until the panel was satisfied that everything that needs to be done is done.

Amy?

MS. RYDER: My name is Amy Ryder. I'm with Ohio Citizen Action. I have two questions.

One was just, I wasn't clear on the summary discussion on slide 86. They have listed that startup is approximately one month later. Is that your understanding, that startup would take place in June, that's what's scheduled?

MS. LIPA: Let me take this one. Based on what the Licensee has been telling us so far, and you saw some of the work-off curves, and they know what their long lead items are, they're estimating mid to late May for the Mode 4, an approximate month. And I can't really, you know, make a judgment on that at this point.

MS. RYDER: So, it's Mode 4 then?

MS. LIPA: This would probably mean, Mode 4 pressure test, which is the Normal Operating Pressure Test, which they're planning mid to late May. That's the 7-day test. And startup would be restart,

which would mean Mode 4.

MR. GROBE: Mode 2.

MS. LIPA: Mode 2, which would be their estimate that they would be ready to ask for approval to go to Mode 2 in about a month. That's what that means to me, but I can't tell you if that's accurate.

MS. RYDER: Okay. My other question is regarding this issue of the, two of the four gaskets on the reactor coolant pump; is that correct?

MR. GROBE: Um-hmm.

MS. RYDER: Two have been replaced, and they're still up for debate whether the other two will be replaced before we start. Has that been resolved?

MR. GROBE: I don't believe there is a debate on the part of the Licensee. There's been a number of questions raised. Let me just clarify.

In each reactor coolant pumps, there is four reactor coolant pumps, each one has two gaskets. It's a pair of gaskets with a leak off in between. And, these are on the main bolting of the reactor coolant pumps, reactor coolant piping.

The company chose to refurbish two of those during this outage, and refurbish the other two, is scheduled for the next outage, which is a year from now -- or a year from

when they restart. Excuse me.

There has been a number of issues raised about that, and there is an individual at Region III that's reviewing those issues, and I haven't received the results of that review yet, but the company's current plan is to not refurbish two of those pumps until the next outage.

MS. RYDER: Are you comfortable with that?

MR. GROBE: I just told you, we're reviewing all the specific issues on that. It's important to remember that these pumps are not safety-related pumps. They're the pumps that are used to circulate water for producing power. The safety-related pumps, we would have been much more involved had these pump been safety-related pump.

The specific gaskets do provide an opportunity for leakage of reactor coolant. There hasn't been leakage of reactor coolant in this area, and that's why they have the double gasket design. It's only been one of the gaskets that's been degraded.

Like I said, there is a number of interesting technical issues that have been raised and we're looking into it.

MS. RYDER: So, you don't think that the other gaskets are leaking?

MR. GROBE: Amy, I don't have any detailed knowledge of it. I'm telling you what I know about it. We're looking into it, and as soon as we have the results of that, we'll certainly let you know.

MS. RYDER: Okay.

MR. GROBE: Is that it? I thought you had two?

MS. RYDER: That was two. I'll keep going.

MR. GROBE: Okay.

Yes, sir?

I did have a timid bunch this afternoon.

MR. RIDZON: Paul Ridzon, McDonald Investments. I think it was either you, Jack, or Bill threw out, wants an 80-man week scheduled for inspections. I wonder if that is still accurate and kind of work-off rate on that?

MR. GROBE: The total number of man weeks inspection, that was quite awhile ago, I think maybe two months ago, has gone up just a little bit; and, in two areas in particular. We added some additional resources onto the Safety Culture Assessment, and we added some additional resources onto the Corrective Action Team Inspection.

We've been doing a significant amount of inspection

over the last several months. I can't give you the current number of how many inspector weeks I believe are left, but there is still a significant amount of inspection left. I think Christine summarized it on her slides earlier. Let's see if I can do it from memory.

There was four major inspections that are still outstanding. The Corrective Action Team Inspection has two or three more weeks of effort. That currently is not scheduled. It's maybe sometime in the middle of May. And that's an 8 person team, so that's 16 to 24 weeks of effort. And the Safety Culture Team has a couple weeks out of it left. And so, those are two of the major inspections that are left.

MS. LIPA: Right, we still have the Normal Operating Pressure Test. We still have a one week Fire Protection Inspection, and that's three people for one week. And we'll still have Restart Assessment Team, that will be right before restart.

And the other thing I wanted to point out, when the Licensee went through today their Restart Action, went through the Restart Checklist and it turned things green when they were complete. What that means, once it's green and they've completed their work, that's when we can do our inspection on that area.

So, we've been inspecting as they are done and we

mentioned at the beginning, that several of these will be closing ~~on~~ in our current inspection report.

MR. GROBE: And there is just one more that I remember, that you skipped over, and that was the Programs Inspection. That inspection is well under way, but there is still a little more to do. So, you know, I guess, to give a general comment, we're kind of midstream in our effort.

MR. RIDZON: I know it's out of your hands. I know a lot of this is out of your hands, but can you squeeze those inspections in before June 1st? I know it depends on when things turn green.

MR. GROBE: You know, I'm not into the schedule projection business. That's FirstEnergy's responsibility. We can't inspect the work until it's done. As Christine just pointed out, until those bars go green, the work is not done. So, there is, it's not ready for our inspection. As things are completed, we are inspecting them. And, I will continue to do that.

So, when the plant is ready for restart is when it's going to be ready. The company shared a number of activities that are still in the formative stages today. They mentioned the high pressure injection pump. What's referred to as the ETAP calculations; that's electrical

power distribution calculations; the diesel generator evaluations.

Those evaluations are still being completed. Final actions that are necessary to resolve those haven't been crystallized. They're working on those. So, there is still a couple of unknowns here.

We'll continue to progress. What's today, April 15th. We're going to have our inspectors here between now and our next public meeting, and we'll continue to give you feedback, but my statement, and some of the reporters kind of get bored with this, but it hasn't changed over the last several months. The company is still making good progress. I think that they highlighted today the results of the Integrated Leak Rate Test. That went very well. It was a very complicated test. Requires a tremendous amount of coordination. Went very well. And the results were positive.

So, that's one more activity checked off the list, but also an indication of the way in which they're accomplishing. There is still three significant areas that we're watching. There is what I call bulk work. There is still a lot of work to be done.

Second is resolution of the engineering design issues. They have made progress on a number of them. They still have several that I just mentioned that are still

outstanding. We need to identify the success path and get it under way.

And the third is the Safety Culture area, which they're well under way in. And Doctor Haber has completed her report. It will be public, I believe the company got it this week, it will be public shortly. And they have now completed their second internal assessment and our inspection team has begun its work.

So, they continue to make progress, but there is still work to be done. Those are the three areas that I still see the challenge areas. And, you know, we'll get to restart when we get there.

MR. RIDZON: Thank you.

MR. GROBE: Any more questions or comments?

MS. LIPA: I would like to mention that we will have another meeting tonight at 7:00 in the same facility. Also, that the upcoming monthly meetings will be May 6 and June 3, and I have them scheduled to be here at Camp Perry.

We also mentioned earlier in the presentation, we're working on scheduling two other public meetings; one to discuss the Design Issues and one to discuss the Safety Culture. So, there is some upcoming events.

Anybody else have any questions?

Okay, well, thank you for coming.

MR. GROBE: Thank you.

(Off the record.)

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CERTIFICATE

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

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office at Norwalk, Ohio, on this 25th day of April, 2003.

Marie B. Fresch, RMR

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