MR. GROBE: Let me make sure I understand what you said, Randy. When you said that a certain number of your 2000 or so items of observations have been dispositioned by creating work orders, I want to make sure I understand that.

MR. FAST: Okay. There is 280 condition reports. All of the inspections that were done generated a condition report for any deviations, didn't meet our standards. Each one of those condition reports would have one or many individual items that required disposition.

Of the 280 condition reports that have been written, about 30 of those condition reports, which would be somewheres in the 15, 20 percent range, have been dispositioned. The physical work that needs to be done generates a work order. The work order is the actual maintenance process to complete the work. And those 30 are in progress.

MR. GROBE: Okay. So, you have condition records -- the focus of my question wasn't clear. I apologize.

Have the condition reports been closed out to work order, or condition reports won't be closed out until the work that's specified in the work order is completed?

MR. FAST: The condition

reports will not be closed until the work is completed and verified.

MR. DEAN: Then you would say that those 280 condition reports essentially encompass the results of the inspections. Although, the way I understand it, you still have some validation effort ongoing, but you've completed your initial inspection?

MR. FAST: That is correct, Bill. The 280 are the original inspections. I would expect it will be generating some differences, based on those reinspections.

MR. GROBE: Any other questions on Containment Health? I have a couple more.

I just want to make a couple comments. I think the Containment Health Plan is a substantial improvement from what you showed us last month. For one thing, you have detailed procedures in place for the inspections. The scope of the inspections is much more comprehensive with respect to evaluating the condition of the equipment inside containment.

Based on, again, this is just based on what you've told us, you haven't done extensive inspection in these areas, but based on what you told us, it appears that you're going beyond what, the event, the head corrosion would have caused you to do. And I think that's helpful.

Nuclear plant workers work to procedures. They understand that. Quality assurance program assures that procedures are adequate; they're adequately implemented. So, this context of detail procedures and systematic approach to training, that's a nuclear standard. Those are very good attributes of the program and assure the results of high quality activities.

I'm very encouraged to hear that you're having as part of your inspection program a separate independent look. And that's important from two standpoints. One is it's always better to have two sets of eyes than one, but secondly, quite frankly, there was a question regarding the, the standards of the workers that were making decisions in the plant. And I don't want to infer by that that all the workers at Davis-Besse don't have the right standards. That's not what I'm trying to say. But there was a question. And this will give you insight as to whether or not that is a broad question, a narrow question and what it means as far as the accuracy of your inspections. So, that's good.

I also heard you say, as I was pursuing the question of what independent inspections meant, that completely independent at Davis-Besse organization, the folks in Bill Pearce's organization are going to be doing independent assessments.

And Lew, I think it would be very healthy for us to hear Bill's staff's evaluation next time we meet on the activities that you're presenting. And, I would fully expect, let me say, I would be surprised if his evaluation is completely rosy. Hopefully, he's finding some things that continue to have done.

So, I would hope that next time we meet, not only can we hear from the staff that's doing the work, but I would like to hear from Bill's staff to get on the FENOC corporate independent assessment, the quality of the work that's going on in the field.

MR. MYERS: That would be good. We would do that.

MR. GROBE: Anything else before we move off of Containment Health?

Okay. Good. Thank you, Randy.

Marie, we've been at it for about an hour and 15 minutes; is it time for a five minute break?

MS. FRESCH: Sure.

MR. GROBE: Okay. Let's do that. The last time, we wore out her fingers.

MR. MYERS: Could I just summarize on the Containment Health Plan?

MR. GROBE: Sure.

MR. MYERS: I think once again

we demonstrated at the last meeting we were in the plan phase, doing some discovery, doing implementation or physically doing work. And, you know, we've taken on some value and expanded the program.

We're upgrading our coolers. We're extremely pleased with that. The thermo cavity seal is a major, major effort that would add a lot of value and margin to our plant; and it will produce, or does make our plant a better plant. So, we're moving to good implementation on that.

MR. GROBE: Okay. My watch says 16 after. Let's be prompt at 21 after, five minutes, and that way we can keep things moving.

(Off the record.)

MR. MYERS: The next area we would like to discuss is System Health Assurance Plan and Howard Bergendahl will do that.

MR. BERGENDAHL: Good afternoon. As Lew indicated, we are committed to the safe operation of Davis-Besse, more importantly, sustained safe operation. So, we're examining much more than the reactor vessel head and containment building. I'm going to briefly describe where we are on System Health Issues.

MR. GROBE: Just a minute. Could you please close the doors back there?

Thank you.

MR. BERGENDAHL: There is two Building Blocks we're trying to cover, The System Health Assurance Program Compliance -- and these two Building Blocks, as I indicated, are expansions over what we just described.

The first one is System Health Assurance Plan. Basically, a review of the key systems from three different perspectives. Taking an operational look, basically focusing on the needs of the operator. A second perspective would be the system reliability, and that's the system engineer's view of the system as a whole. And third is the design perspective of a system.

Now, the first one, called the Operational Readiness Review; that was the operating perspective, as I indicated. The plant manager led those reviews and they are complete. That was a team review of some key systems and review of the indicators on how that system is performing and when it's ready for safe operation.

That first cut review by Randy and some of his staff identified some of those issues I mentioned earlier that may have met compliance, but did not meet the standards for future operations. So, that produced some work activities that we had maybe identified for future implementation, pull those up to current, to current outage.

That review is complete. And, then moved on to System Readiness Review, which is a more structured review of the risk significant maintenance rule systems, focusing on material condition of the plant and including some detailed system walkdowns. And walkdowns would be done of course, with procedure.

And the results of these reviews would then be presented to an independent board, which is our Program Review Board, which is a subcommittee of the Engineering Assurance Board, which we mentioned earlier.

MS. LIPA: Howard, I have a question for you.

MR. BERGENDAHL: Yes.

MS. LIPA: On the operational readiness reviews that are complete, is that complete and identifying what needs to be worked or is all the work done?

MR. BERGENDAHL: It's complete in identifying the issues of what needs to be performed; that work has been identified, and it is not all completed.

MS. LIPA: And then are you also looking at operating workarounds as part of that review?

MR. BERGENDAHL: Yes. That was part of the perspective of what systems have operating

workarounds, outstanding modifications, things of that nature.

MS. LIPA: Okay, thank you.

MR. GROBE: That's, that's a new one for me. I wasn't aware that you were specifically looking at operator workarounds. Let me make sure I understand that.

When I think of an operator workaround, I think of things that are embedded into procedures, things are embedded into the culture of operating the system, operational characteristics of a control room of a system, as well as operational characteristics in the field; things our operators are having to work around potentially a design, not deficiency, but lack of optimal design.

Are you looking at those kinds of things, scouring through procedures, the workarounds?

MR. BERGENDAHL: Yeah. The first Operational Readiness Review that Randy chaired, he can describe it in a little more detail, but it was designed to flush out issues like you describe.

MR. FAST: Jack, what we put together in this process, 36 systems, as I recall, and five other systems, like gear operated valves, motor operated valves, breakers, things of that nature. We established criteria. Had the system engineer come to review panel,

which consists of myself, operations and engineering and maintenance folks. And we were focused on the system health.

Brought into view then the performance of the system in the past and its present health. We use criteria like operator; we have a level one, level two, and level three workaround, we track in our operations group. So, as an individual would bring in a system, they would identify any outstanding work orders on the system, modifications that were pending for it, any operator workarounds that have been established, procedures that needed to be revised or written to support system health.

And that board was really, I'm going to say, an advocacy to the system engineer in creating a form where they could bring the issues to the table and get the appropriate level of support to ensure that those items would be complete.

As we did those reviews, some of the legacy issues, I'll call them legacy issues, system engineering; we said if there were longstanding issues with problems of the performance of the system, bring those forward with your recommendations as well.

And, I'll give an example. I'm trying to be specific. Something like the high pressure injection motors. Been there since the life of the plant. Never

been taken out, sent out for complete overhaul and health check.

One of the engineers came forward and said, I would like to talk about the health of the motors and where we are and make proposals to send those out and have complete inspections done. And, we subsequently agreed and are in the process of taking those actions.

So, right now as we speak, their HPI motor is being rigged out of the building to be sent out for complete remediation.

There were other items, like items, diesel start systems. System engineer said, here's one that's pending modification. We need to put some emphasis on it. We agreed. We applied the engineering resources, and that is undergoing design, and that will be implemented as well.

Those are the kinds of things that the Operational Readiness Review did.

MR. GROBE: Let me just ask a little bit more, get into little more depth here.

Something like a motor that hasn't had a comprehensive amount of maintenance in 25 years, would that be consistent with the vendor recommendations for that motor?

MR. FAST: The original design of those motors for life of the plant was 40 years;

however, they're not outside of their design basis, but it's just prudent maintenance activity to take those out and do a health check on them.

So, we were doing the vendor recommended preventative maintenance. Those items that are required; bearings, lubrications and such, were within their period, but it's the unknown, it's the unknowns about that which really require a teardown and review.

So, they don't go through much of a duty cycle, but it is just a prudent maintenance practice. This is above and beyond what the vendor would recommend.

MR. GROBE: Okay. Let me ask a question, you just mentioned a couple specifics. This diesel air start modification; was that something that was a pending modification or was that something that had not been requested?

MR. FAST: That was a pending modification, did not have implementation plan or target date for at least in the near term. And that was an example, we said we're going to pull that forward and complete that work.

MR. GROBE: Okay. So, back to the original question, which was operator workarounds. You included in your Operational Readiness Reviews, operator workarounds that had already been identified. Did you go

through a systematic review with, or was the intent of the scope of this to find out review of the workarounds that were latent?

MR. FAST: That was not really, the focus was on system health. If there were any outstanding operating workarounds, those are tracked by the system engineer. He knows he's got a level one or level two workaround.

Our Return to Service Plan included completion of all the operator workaround activities. So, those came up and when we said, so what are we doing about this level two operator workaround, it might be that we needed to implement a minor change to the design of the system. Then we said, let's progress that, get the work order and get that out.

MR. GROBE: Okay, thank you.

MR. BERGENDAHL: Now, the next level reviewed is System Readiness Review, were more structured comprehensive. That would flush out more of the items, Jack, I think you refer to, which are not tracked as an operator workaround, but procedure aspect.

In that review, we will review the close condition reports for the last few years to see how we dealt with problems. Closed maintenance work on a plant, on a system, open and close modifications, operating experience. It's a

more structured review and it goes through a panel to independently assess the thoroughness of that review.

In addition, on the next slide, we've added a new program called the Latent Issues Review. This is a more detailed look which gets beyond even the areas I just discussed and goes into the System Health Plan design perspective as well.

This program has been used at our Beaver Valley Station. We've adopted this program and identified some systems to go after first. And ones that you see here are systems that we selected to put this thorough team review.

Now, this type of review, very broad detailed review, takes a team of people a couple weeks to perform. This review goes back and looks at the original design basis, the emergency procedures, all kinds of industry operating experience, any operability reviews that were performed, problematic risk assessment; and a very detailed look.

We selected the Reactor Coolant System, Auxiliary Feedwater System, Component Cooling Water System, Emergency Diesel Generators and the Service Water Systems in these reviews.

And we have currently assembled teams. We've put together the guidance and structure for doing these reviews, and the teams are starting reviews now. I believe

as of this week we have all the teams assembled.

MR. GROBE: Before you go on, Howard -- I'm sorry. Go ahead, Dean.

MR. DEAN: I was going to ask you, do you intend to do these design reviews or latent issue reviews in parallel or do maybe one or two and gain any lessons learned and apply that to the other ones?

MR. BERGENDAHL: We started on the Aux. Feedwater System as kind of a pilot to see if there was any process improvements that could be gained. Make sure we got the right scope and expertise.

So, we initiated that one. Did learn some things from that, and modifying our process and using that. We expected this new program would be continued to be used at Davis-Besse. It's proven itself at Beaver Valley, and it really does a good thorough job of examining the systems, going back to the original design.

So, we plan to continue this program.

MR. MYERS: Let me comment on that too. Neil Morrison is with us today. Neil was the person that spear-headed our reviews at our Beaver Valley Station for the past two or three years. How many years now?

MR. MORRISON: Two and a half years.

MR. MYERS: Two and a half years. And so there is, he's got a lot of lessons learned there, so this is not a new program for us. We're just moving it to this plant.

But if you look at where we've been spending our money at other plants, a lot of our money has been spent on a lot of things, finding these latent issue reviews. We found significant ways to improve the quality of our systems at our other plants. So, we're really excited about bringing this program to our plant. We think it's the additional margin for the plant.

MR. GROBE: Howard.

MR. BERGENDAHL: The output of these reviews again goes through the engineering assurance board to get an independent check on thoroughness and rigor on the reviews of the systems.

MR. GROBE: I've got a couple questions. It's an interesting list of systems that you're doing the Latent Issues Review on. Reactor Coolant System is clearly a focus of the shutdown of the plant; recognizing that the head is part of the Reactor Coolant System.

Auxiliary Feedwater System, Component Cooling Water Systems, Emergency Diesel Generators and Service Water Systems are normally four of the five primary systems that

I'm familiar with that comprise almost the entire risk of problems at the plant, but the fifth one is DC Power. Is that a significant risk contributor at your plant? I'm not familiar with PRA.

MR. POWERS: It's a good one. The fifth one is, Jack, the Diesel Center --

(Requested speaker to repeat.)

MR. POWERS: I'm sorry. DC is part of the Reactor Coolant System, for instance, diesel generators. The Aux. Feedwater System, Service Water and Component Cooling Water Systems.

MR. GROBE: Jim, my question was, normally when you look at say 95 percent of the risk contribution, it would come from those four systems plus DC Power. And I'm not that familiar with your risk analysis for Davis-Besse Plant. Does DC Power play a significant role in the risk contributions at Davis-Besse?

MR. MYERS: I don't know if we know the answer to that.

MR. GROBE: I don't expect you to know every answer to every question.

MR. POWERS: No, I have an answer for you. What we've done, is on the preceding level, what we have learned to do on our System Health Reviews, we've included the 1.50 DC Systems as part of

that. Those are the main systems; there were 35 of them that we are going to be going through, Jack. So, we're going to be looking at those in some level detail.

We didn't select those for the deep cut, but we think the deep cut in the five systems that we've listed here is going to tell us generally how, what the health of our systems are.

MR. GROBE: Okay.

MR. BERGENDAHL: The System Health Review will identify further evaluations that are required. We need to do a more thorough evaluation.

These systems were selected, as you indicated, important systems. A couple of them had system health indicators, indicated that we had some issues with the system in the past couple of years. And then we added a couple that our indicators show very reliable performing as well, but since they were high impact systems we added those; and allows us to validate our monitoring programs.

MR. MYERS: We still haven't answered that question; how does it affect PSA that you want us to look at. We'll give you an answer to that shortly.

MR. GROBE: Okay.

MR. BERGENDAHL: Any other questions on the system reviews?

MR. GROBE: Any other questions?

MS. LIPA: Yeah, I have one question. On the, in your plan dated July 12th, you talk about that, through these reviews you're going to identify conditions that need further evaluation that could impact the function of a system. And it sounds like a subset would be restart items. What criteria are you using to decide what items become restart items?

MR. BERGENDAHL: In our Return to Service Plan, we laid out a process. Every condition, any appliance we have will be documented on condition reports. These condition reports go through a station review board that we would send to specifically evaluate all the conditions against restart criteria. Technically, on the restart action plans. Multi-field criteria. Safety. Importance of safety -- I don't have the criteria memorized. I could get that for you, Christine.

MS. LIPA: Okay.

MR. BERGENDAHL: It's, actually we met today and we drafted a procedure for our Return to Service Plan in process -- Let me correct. Our Restart Action Plan process. And that criteria is in the procedure which we reviewed today. It will be used in that.

MS. LIPA: Okay.

MR. BERGENDAHL: It's also in the chart for that station review board, clearly documented.

MR. GROBE: Howard, have you, follow-up on Christine's question; have you done the screenings through your restart criteria and if so, how many have you determined, what's the population restart items to date?

MR. BERGENDAHL: The answer is yes, we've started. Every day, any reviews that are going on generating condition reports immediately upon identification. I'm not sure of the exact number. There is probably four hundred some odd actions that have been identified that we will get resolved prior to restart.

MR. GROBE: I think in the future meetings, Lew, one of the things we would want to do, I know that you're developing some performance indicators, I haven't peeked ahead, so I don't know if you're going to talk about that, but one of the things we want to understand in some detail is flow rates of work; what's coming in and what's going on out, and what's in the business to be worked as far as restart items, and other issues that might go into performance indicators that you developed as far as your approach toward restart.

And, I appreciate we're still very early in this process, but we're going to need to start getting into

somewhat detail in that regard. So, at future meetings, we would possibly get that sort of data and start looking at detailed future work, backlog work, accomplishment of work, things of that nature.

MR. MYERS: What we can do, is Clark is in the audience, he's a building block on our restart action list and we can start putting him up there to tackle that.

MR. GROBE: Whatever you think is necessary.

MR. MYERS: Let's do that next time.

MR. GROBE: Okay. Did you have a question?

MR. MYERS: Clark, get ready.

MR. GROBE: I had one other question regarding the Latent Issue Reviews. I understand you used these at one of your other sites in the FENOC system; really two questions.

This type of activity has been done on a number of plants, several on the east coast and midwest that I'm familiar with, but I'm sure there is others also. Have you tapped into the expertise of what's been occurring at other plants to ensure the comprehensiveness of your Latent

Issues Review?

MR. BERGENDAHL: Absolutely. The D.C. Cook Plant, gone through some pretty good reviews and we've visited that site, and we look for best practices throughout the industry, and we have adopted lessons learned from those.

MR. GROBE: Okay. Can you give me an idea of something that you might have learned from your D.C. Cook evaluation that improved your Latent Issues Review?

MR. POWERS: As a matter of fact, we are previewing not only the procedures D.C. Cook used, also the people that have come over here and are helping us now lay out the strategy. People experiencing what was done at Cook, Millstone, Salem and are using the composite of all that knowledge.

What we learned most specifically, Jack, is the level of detail to go into, we believe, that drive the FENOC Latent Issues Program another step, higher standards as part of this. It's gone quite well for us. And we have used others, past several years, but we think this process is going to go to a higher level of detail. So, we think we're on the right line.

MR. GROBE: I think Cook is a good place to go. A number of the people came from Salem,

Christie River, Oak Creek; most of them that put that program together. So, it's kind of one-stop-shopping, so to speak.

MR. MYERS: It is dependent, you know, on our steam generator -- on our head replacement. We brought people in that just replaced steam generators at the Cook Plant. We have some welders from the, that were over in the --

(Requested speaker repeat.)

MR. MYERS: We brought some craft members. We brought some experienced people, people welding rebar back on containment. So, we're looking for that kind of experience.

We're using, it's Cook is really good. There is some other places you can gain valid experience too. It's a little different for our case, like the steam generator replacement. You have to cut a hole in the containment and put that on, like we're doing to install the reactor head. It's not something that they did at Cook. See what I'm saying?

So, we're trying to get the best everywhere, and are applying some of that information that's necessary for our operation.

MR. GROBE: Okay. I had one other question on Latent Issues Reviews. I think I know

the answer to this question, but I want to make sure.

This is something that was used to some level of success at Beaver Valley and it's going to be used at Davis-Besse. Is this something that's going to become part of, say, the culture of First Energy System?

MR. BERGENDAHL: Absolutely.

MR. GROBE: That you're going to do this type of review at all the plants?

MR. MYERS: The Latent Issues Reviews. One of the operational officers, one of the things I was going to do even if I was running one of the bigger plants in the country would be to take a couple systems a year, and look at them from this latent issues effect, because to make sure that you're maintaining your design, your documentation. It's a good process, and I would use it at all of our plants. So, the answer to that is yes.

MR. GROBE: Okay, thank you.

MR. BERGENDAHL: Okay, the next two slides are just some photographs of the work that Randy indicated we initiated some work on the Decay Heat Pumps, and the next slide is just some, bringing in many additional resources, as Lew indicated, craftsmen from around the midwest to help us with the work we have going on at Davis-Besse; a lot of scaffolding to support the

inspection of containment and work activities.

So, we have a good work force out there and a lot of good work. The items that we identify are being worked off very well.

Next area is Program Compliance Plan. And, this also has two different, we call them phases. They actually parallel. Doing a program readiness review, which is a baseline of our plant programs, we will assess, based on the root cause of reactor head problems.

We identified some issues and standards and ownership and oversight, and we set up some criteria to go back and review our key programs on site, and assess them against this criteria; present those results to our independent review board; and really understand the overall compliance and implementation of health of those programs; to look at things like the qualifications of the individuals involved, the interfaces, the individual program owners have with the other groups. And again, then present those to an outside independent oversight board.

In addition, much like the Latent Issues Review, we developed a phase two or detailed program review, and Lew mentioned Neil Morrison would be working on the System Latent Issue review. We asked Neil to come over to Davis-Besse and apply that same rigor to programs. We designed a program and wrote a procedure and we're using

that procedure to do these detailed program reviews. They're in-depth systematic review of key programs.

Now, the first programs we're starting review on, the next slide shows the implementation of this program. Starts off with using it on the, the programs that were identified in our root cause and we have some issues.

Each of the programs on this list when we did our detailed root cause on the reactor head degradation, there were some issues identified on each one of these systems. So, we selected these systems to initiate our new detailed program and review on.

Now, we started a pilot, we call Probabilistic Safety Assessment Program. Since this had not been used at any of our other facilities, it was new initiative. We piloted it and thought Probabilistic Safety Assessment Program to ensure the process was sound and our assumptions and criteria were right.

We completed that pilot review, and we've moved on to the Boric Acid Corrosion Control Program, and scheduled the rest of these programs all to be put through this thorough review process prior to restart at Davis-Besse, and then we'll continue much like the Latent Issues Review to apply this problematic review to additional areas of the site.

Again, it's a good thorough look at Davis-Besse's

systems and programs. It's under way, it's identifying improvements, issues and we're following off on these issues as well.

Any questions on our Program Compliance Plan?

MR. DEAN: Howard, can you share with us some of the insights you gained from the pilot review that you referred to just a moment ago?

MR. BERGENDAHL: Yes, the pilot on the PSA, I don't have any specifics, but what we did there, is we took a program. The reviews are done by an, independent team members, we bring in from the outside of Davis-Besse. So, what we did with that, is pilot putting together a plan, bringing in the outside members, developing a report and presenting that report to the review board.

I don't know if you have any lessons learned, Jim?

MR. POWERS: I think some of the insights that we found, our pilot program, that's our Probabilistic Safety Assessment, that's one of the strengths that we have. I think at the Davis-Besse site and I think you've seen that with interface with your PSA Supervisor, Ken Berg. So, it's an opportunity to look at what is a fairly healthy program with good ownership.

Now, what we've also found is we've been moving forward with the Boric Acid Control Program and Corrective

Action Program; those are ongoing. We've made substantial progress in both of those.

That Boric Acid Corrosion Control Program, we've got a draft report, final review stages now. So, we can learn from those areas more significant areas of improvement that are required; ownership, corporate industry results; in the case of Boric Acid Corrosion Control Program.

In the Corrective Action Program, we're looking very specifically at, you know, detail regulation and how the program matches the regulation and going through lining those up one by one and every process, and there are areas of improvement there. You'll be seeing those results coming out of those. So, we're finding areas in issues that need improved.

MR. DEAN: Are you incorporating a new benchmarking relative to, for example, best industry practices, for using info to give you?

MR. POWERS: Yes. As a matter of fact, that's a good point. Kind of a key element of this. These reports as we do them are being provided to INPO, and in some cases on the detailed reserve, INPO is participating on the team.

They are set up down in Atlanta to take our reports, as we review all our programs and send them out to industry experts at other sites that they've identified where there

is good industry practices from benchmarking they've conducted, and we'll be getting feedback from those peer sites to help us improve our standards.

MR. MENDIOLA: Are these benchmarking, these lessons learned, these program improvements being reflected back to the other plants at First Energy?

MR. MYERS: Yes.

MR. GROBE: I have a couple thoughts, I guess, on System Health Assurance Plan. The Operation Readiness Reviews, the scope of that activity clearly was something that needed to be done following the situation that occurred with the head.

The System Readiness Reviews, I think some aspects of that also were direct outgrows of the lessons that you learned from the head situation.

The Latent Issues Review clearly goes beyond the depth of what would normally be expected, and I'm glad to see that you've taken these significant systems to do this Latent Issues Review. I have confidence based on your experience at Beaver Valley and the input that you're getting from outside your organization that those reviews should be of good scope.

The programs area, likewise, I think the level review reflects not only what happened during the head

corrosion event, but also some things that you're going beyond the scope of what may have been directly indicated from the initial findings of the head corrosion event. So, I think that likewise is good.

We're still in the phase of, in many of these areas of inspecting all good plants. In a couple of areas, John talked earlier about some inspection work that we've done already on a nondestructive examination we've had.

And Mel has done some early inspection work and provided substantive feedback to you on the containment, early containment health work, or extended issue work, I guess it was called at that time.

There will be substantive inspections that will be coming as you get into these in greater detail, and start completing some of this work. We'll be taking a good hard look at that, and also giving you feedback.

We're going to be working closely with your staff that are implementing these activities to make sure we understand your schedule and what activities will be ready for inspection.

We don't plan on inspecting things before they're done. We're not part of your team. We're not supporting the success of your program. We want to look at what you've accomplished, and we'll achieve our confidence based on the quality of work you do.

You've mentioned a number of occasions assessment boards and review boards. I've watched over the last several weeks as things evolved, and you've got quite a different character of outside influence on these review boards, created more review boards, structured them. In a future meeting, I would like to get some feedback from the value added, a little bit more detail on the structure of those boards, what their function is, what they're accomplishing, and also some feedback value added from those boards. What they're seeing.

Because those boards will give you a direct reflection of the quality of the work, not only that the people are doing in the field, but also the folks that review and approve that work. Because the boards shouldn't see that work until it's been through your review process, you know, in your line organization.

So, I'm hoping to get some insight from that. Hopefully, that can be on the agenda for the next meeting.

MR. MYERS: We can do that.

MR. GROBE: Okay. Any other comments on systems or programs?

Let's move on.

MR. MYERS: Before what you commented, I think the programs review is something that helps us understand that each one of our programs is a

pretty significant list of programs out there that we have best industry implementation, doing the industry implementation. It's not the minimum criteria, it's where we have the margin. And that we have good ownership, and finally that we're implementing that program properly in the field.

So, that's really the structured process to go into this whole latent issues process in and out. I note the long term, I see that as an essential building block.

The next area that we have to talk about is Management and Human Performance Excellence Plan; and particularly the Management Root Cause. I would like to introduce that.

It's hard, as folks say, to call your baby up. But, in the last meeting, I indicated that management, "Management ineffectively implemented processes, and thus failed to detect and address plant problems as opportunities arose"; especially in the forecast approach.

There is four key areas of focus that we're looking at; Ownership, Oversight, Standards, and Decision-making. And, our Boron Program does not have good ownership at the engineering level to insure that we were meeting the standards in industry, and that the requirements in our program were proper.

The oversight groups in our management team were not

properly involved with that program to insure that we have proper implementation. We're not out in the field looking at what we were doing.

When problems were found, we did not have a good questioning attitude in this boric acid issue that lead to the easy conclusions. It was easy to justify that no leaks in the past were the cause of this boron buildup. It was an easy conclusion.

Our initial management reviews have come up with some assessments that we can share, and that's that standards have existed for many years at Black River in problem solving. Our reviews are going back to the 1980's, and have indicated this lack of problem solving at the management level is something we have to work on.

Another thing we can say now is when there has been times at Davis-Besse Plant that we had strong management leadership. In the 1980's and 1990's, the trend was to properly identify problems and resolve them. So, that lack of rigor was not evident and you saw improvements in the performance.

For example, I had a supervisor tell me today that in the early 90's, Davis-Besse was setting the standards that everybody else was coming to look at. That's one of those standards we need now.

As industry hired many of our leaders at the

Davis-Besse Plant, replacements reduced strong daily involvement that resulted in a lax attitude of fixing the problems. Let's just get the problem fixed. And since you have that lack of rigor in decision-making down below, the problem came evident.

Let me say this. The Davis-Besse Plant has operated well for many years and it's still in very, very good material condition. As good as most plants in the country. However, as new problems arose, without strong upper level involvement, and the lax rigor, the decision-making process appeared to be narrowly focused in several cases that we've looked at.

Our approach has been simple. We initially assessed the root cause of the head degradation. What would cause this problem? As we did that, we also looked at some management issues. We did that because we had noted that there was a time performance at our Davis-Besse Plant. So, by going to the technical root cause, we could first give us some time to make some of the overall structure changes that we wanted to make.

For example, we created the job I'm in now, the Chief Operating Officer, to provide additional plant oversight of all three of our plants.

We created a new position, an elevated position of oversight and promoted Bill Pearce. We brought in Harry

Light, an executive from the Institute of Nuclear Power Operations to be our Executive Officer of Engineering. We need that time to make those strong implement changes.

We brought in a new group of executives from the industry to provide us as a management team with some insight on the types of problems we might be encountering. And they gave us a tremendous amount of insight. Several VP's from several top notch utilities came in.

I was personally moved to the Davis-Besse Plant, so we could ensure that we had plans and organization to return Davis-Besse back to service in a safe and reliable manner. And I plan to devote a significant amount of my time until I feel confident that our performance would be sustainable.

I chartered the Root Cause Team to look at the management issues. Steve Loehlein will now discuss with you the methodology we've gone through.

MR. LOEHLEIN: Thank you, Lew.

Lew mentioned to you the AIT's report and our own technical cause report talked about degradation of the head over the years. What we're doing now, is caused now, is looking at the why; why this happened over a period of years, that this was not identified and dealt with.

I would like to say first to you, Jack, this team that we have working on this particular issue really

understands how important the answer to this problem statement is, because we know we can assure that the right solutions are pursued so the plant will be able to sustain safe performance.

Now, Lew mentioned earlier some of the assessments have already been done by various industry leaders. And they do provide a lot of understanding to many of the performance shortcomings. What we're really doing in this process is assuring that we're digging down.

Our objective is to compliment the effort that has been taken on so far by applying the rigorous root cause analysis technique, and that will ensure that they're more subtle nonetheless very important causes for this upcoming overall project.

Next slide.

We have our Root Cause Team in the front row. I would like to ask them to stand. It's a group, I'll tell you who they are. We have from our Perry Plant, we have Mario Destafano and Bill Babiak. In our Quality Assurance Organization there, we have Bill Mugge, Bobby Vallines and Joe Sturdavant, who are all Davis-Besse men.

We have a couple of experts from Conger and Elsea, Lesley Wildfong and Dick Smith. Now Conger and Elsea is the company that developed the Root Cause Analysis Technique that we're using to develop about 20 years ago.

It's been used on a lot of very significant investigations, including the challenge.

Final member we have here is Doctor Spyros Traiforos, who was with us for many months also. We use his analysis technique.

Now, the team -- oh, I'm sorry, I missed my own, my comrade from Beaver Valley is Randy Rossomme. You forget our own. Randy is from Beaver Valley in our Quality Assurance.

And myself, I'm also with Beaver Valley. I was Technical Lead. My title at Beaver Valley is Principal Nuclear Consultant.

MR. GROBE: Steve, if you could get those names to our stenographer, I'm sure that would help her.

MR. LOEHLEIN: I'm sure they can, some of those aren't easy to spell.

It's a balanced team. What we're looking for, a continuity for Technical Root Cause, which is one of the main reasons I'm on the team. We have process expertise from outside consultants. We brought in the objectivity of off-site personnel.

Then, we wanted to make sure we included the ownership factor of on-site personnel. There are people that need to be a part of this team, carry the message

forward to the rest of the team, if you want quality by example. People that really know firsthand, understand what we found, what it means to the organization. More or less be disciples to the rest of the organization.

Now, not members of the team, but also helping us are some oversight folks for us. We had Tony Maschari, who has worked with nuclear power, excellent in human performance. He's not been down to the site. I believe he plans to be down sometime in the future.

Leonard Rone, an organizational effectiveness expert that met last week with us, and he's providing us with insights as well.

Next slide.

We have a few photos here. We don't have all the team members in the upper photo, what we have in the room at this time. Here you see us working on a discussion topic. That's Lesley standing there, I'm sure making a point about the process.

This is approach. Again, Lew mentioned earlier the Technical Root Cause results. The Technical Root Cause pointed us in a couple of specific directions. One is the errors in the decision-making occurred over a lengthy period. We saw that there were opportunities to do various things over about ten years that were missed. And that has caused us to recognize that the timeline is also therefore

lengthening that we need to consider.

The other thing that was important on a Technical Root Cause was we had other plant indications that have allowed earlier detection on a problem. These were not properly understood or acted upon.

So, from those key understandings we're investigating four major areas. One is the head itself. Focus there to why wasn't the significance of the boric acid buildup on the head recognized.

The next item there is pressurizer spray valve. For any of you that read the Technical Root Cause Investigation, there was an issue with boric acid pressure, on the pressurizer spray valve in 1998 for which the plant took a number of significant actions to try to gain an understanding of the site focus, and guard for boric acid. Yet somehow the effectiveness of the actions taken there were not accurate to ensure that we identified the problem on the head in the 2000 time frame.

We wish we had an opportunity at the time we were reviewing that to regard that as significant issue to look into.

The third one is the condition of the Containment Air Coolers. The question asked was why wasn't the significance of the increasing frequency and cleaning of these coolers recognized.

And the last major one listed there is similar. It's the Radiation Monitor Filters, also the Technical Root Cause of the monitors filters for them, were developing clogging, boric acid, iron oxide; and why wasn't the significance of that, that happening recognized.

Next slide, please.

We're using an in-depth approach on this, does take some time, developing event and causal factors chart, and we'll see a piece of that on the overhead here. We're also using a hazard barrier target analysis technique in conjunction with that.

The analysis process that we're using is referred to as MORT. It stands for Management Oversight and Risk Tree Technique. That has a number of sections; one on the right side of the tree analysis chart that's designated as Management Time Issues.

We've identified five key sections of that MORT style analysis that we think are relevant here. One is Technical Information Systems that are listed there. One, I'll speak to for this.

I know the NRC, many of you are probably familiar at NRC, used MORT yourself quite often over the years, many of your trainings referring to it. But for those of you who are unfamiliar with it, if I were to pick one of these out, so management support oversight people understand why this

tree concept works.

If you look at management's role, this process per se, management has three primary branches in our obligations. One is to set policy or establish standards. The next would be their responsibility to implement those standards. And then the third major branch would be the concept of managing risks.

Now, if you took that concept of managing risks and looked at its branches, and set three branches to that, would be information systems. How does management get information it needs to understand what the risks are.

Then there is a process that evaluates called hazard analysis. Now, that's the process you have in place to make sure whatever happens out there you're evaluating correctly, so it can be understood.

And the third branch to that particular process is program monitoring, that the programs you have in place inform you and analyze the risks are effective in doing that for you.

So, it's a very detailed analysis technique, which is designed to see exactly where in these processes the errors occur. As we get down through the conclusions of them, we'll develop recommendations for consideration.

Next slide.

I can't see it very well, but from the copy I have

here, that upper left-hand photo shows really the cause factors chart going down the lefthand side. What it shows there is the information we collected for 1997 up to the present.

We do have data points that go all the way back to the early 80's, but that's because that's when the first industry information came out regarding boric acid and how it may affect the fasteners. So, we don't have a lot of data that far back, but we're being thorough in going down all the trails in relating to these issues and sections that we're investigating.

So far, we have information from 69 interviews, and well over 300 documents that are supplying the information for this. The second photo shows, giving us a little tour of the work chart.

Next slide.

As Lew mentioned earlier, we have from the information we have, the understanding we have been able to work with, at least, we've talked to Lew about other management team, these management attributes, management oversight-type things, been at the site. I pointed out a lot of things, but we've also seen management attribute factors that represent things that the site can work on in terms of prebaseline proper standards and staff. And these are the insights we have clearly from our data.

As we mentioned earlier, we have had standards and for years have lacked rigor. That strong management and leadership has been able to have the right things happen, and performance of the plant has been good in those periods. There has been lack of management oversight that resulted in lax rigor in process implementation, and the questioning attitude in some cases is not evident as well.

So, the actual work analysis is continuing. It's pretty short timeframe, but we're working right along. I can't take too long on getting certain things done. It doesn't work that way, but for now these are our insights.

Lew, I'll go back to you.

MR. MYERS: Thank you.

MR. GROBE: Before we go on, we have a few questions.

Christine.

MS. LIPA: An obvious question, and I'm sure there is no answer yet, you know, the timeline for when you're going to start putting some actions into place, because that will be important that we decide how to do our inspections on those various tasks. What's your estimate at this point?

MR. LOEHLEIN: What we're doing right now, that's why we're working so close with Lew. So much what we're doing now is, represents what we call

baseline proper standards, plus information out there on the performance, can be measured as seen by, in forming plans.

We need to do these conclusions and see what sort of adjustments we have to make to those plans for any other results we may conclude.

MR. MYERS: I think the report will be this month.

MR. LOEHLEIN: We're expecting it. Again, root cause, iron clad prediction on when we're to be done, but we're expecting to be done with our analysis and conclusions at the end of the month, and that's where we are.

MS. LIPA: You plan to submit that to us?

MR. MYERS: Yes.

MR. DEAN: Lew, this question is not for you, but Steve. Clearly, you can take some preliminary insights, and I'm sure they jive pretty well, you know, even with what we do; conclusions you come to just by seeing what transpired and how you get where you've got.

Are there actions being taken now in terms of rebaseline proper standards, but the things that we talked about earlier, your revamped management team in terms of

driving those sort of standards and expectations down?

MR. MYERS: Yes, they are. I'm going to talk about some of those in closing remarks. As you said, we've made management changes, restructured some, brought in people already, created some additional oversight and a few positions; myself and Gary, and Bill Pearce. So, we are taking actions as we move forward. We're very conscious about the actions we're taking not being negative actions, you know. So, yes.

MR. GROBE: I have to say, I'm still frustrated in this area. I have a great deal of confidence that once you apply yourselves, the technical problems and the systems area and reactor head and containment setup condition and all those things, that you can do that work well, but safe restart, and more importantly, safe operations after restart on a continuing basis, is key in this area.

And, these preliminary insights, while I know that you have more data to support them, these insights today, we could have probably sat down a week after the discovery of the cavity and come up with these issues.

And like I said, Steve, I know you have a lot more data to support these issues and will be developing further insights, but this is the key in my mind, to long term improvement of the plant. And it's also the key to

restart, along with all of the mechanical processes that you're going through the systems.

Christine asked a question, and maybe I'm just asking the same question again. When are we going to have a clear understanding of specific actions; what your expectations are as a result of those actions, what your, how you're going to measure progress in those areas, what performance indicators you're going to use on how performance in these areas are changing?

Before you answer that, let me just add one more, one more thought. Some of these issues deal with management, some of them deal with staff. Clearly, you've made a substantial change in your leadership team, your senior leadership team, but day in and day out every individual in the plant has to be a leader for excellence.

And, the first level of oversight doesn't come from management. It comes from first line supervisor, maintenance foreman, the field operator is overseeing implementation work by other operators. I don't see anything in here regarding that level. Could you speak to those issues a little bit?

MR. MYERS: Yes. Let me go through my closing remarks a little bit. I think that will answer these questions.

I think we've demonstrated today that our Building

Blocks have moved from the planning, discovery and into the implementation phase in many areas. Okay.

We have taken strong actions to incorporate the comments from our Restart Overview Panel, the meetings we have had with the NRC and the comments we've heard since the last meeting.

We are taking management actions that are substantial and demonstrative.

Let me explain that. As I said, we created a new position of Chief Operating Officer, so that we would have more day-in day-out involvement in making sure standards between our staffs are fine.

Let me give you an example. At our other two plants, we're running the same process in corrective action. And when we ask for operability determination, inoperability determination; at Davis-Besse it was inoperability justification.

That minor difference sent the wrong message. We created the executive, the position of Executive Vice President in Gary Leidich. And then we created VP of Oversight. Those were all pretty substantial changes at the senior level. New senior management team, and a strong management team is now present with, every day at our Davis-Besse Plant with proven leadership. And we've clearly shown that, when we have the strong leadership at

the plant that's involved with everyday activities, that the performance of the plant is efficient.

We've brought Mike Ross in, just at the end of the table, to focus on the operations area. We've already chartered mine. We evaluate attributes of every operator at our station, until we have the right attributes for each position; from nonlicensed operator, to the licensed operator, to the, to the control advisors, he's charting that activity.

We're providing a case study with all of our employees that sets expectation that change of ownership and standards need to be made. We're sitting down with your boards and spending a lot of time in that effort. We will be going back and evaluating each of our employees to our standards. We're rebaselining our standards; do we have the right standards.

I've seen some cases where I thought some of the leadership action standards, if you will, that we've had in place, have deteriorated. We're going to rebaseline those standards. And they will clearly learn, monitor and reinforce those standards at supervisor and manager levels to make sure they understand and they can comply. It's that simple.

We've created a new engineering standards of excellence already. That will be a model for each of our

groups. We created a new Engineering Assessment Board. We intend to use that board, it's in their charter to provide you the input you need to know about the quality of the work. And, we'll continue to do that in other areas.

The Plant Manager, Randy Fast, is now chairing our Corrective Action Review Board. In my mind, this is the most important program at our plant. And I intend to have Randy provide me detailed performance indicators on the, on the thoroughness of corrective action from that board.

How many comments do they have to make for our standards and how many outages have they checked. But Randy is going to charter that board. That's not short term. I consider that permanent.

The new operations of leadership to ensure the plant operational focus is absolutely necessary. It was missing in this, this whole issue over the years. It was ours. And if you look, we brought in Mike Ross, and we chartered him to provide us indications that we have the right performance modeling tools in assessing the office of the organization. That's his charge.

We need, have to build teamwork between our managers, supervisors, and line workers. If we can't get that done, then we probably won't be ready to restart; not ever for restart. So, we have to be all on the same page.

At our next meetings, we intend to provide you

performance indicators on how each one of these actions are taking place. What's the effects. What are we seeing from the Corrective Action Program, Engineering Assessment Board, and what are we seeing out of the Oversight Review Boards that we put in place, some on a temporary basis.

But we consider Engineering Overview Board a permanent fixture. I don't see those ever going away. Who continue to be committed to comprehensive approach to ensure the Davis-Besse Plant is safe and reliable, and once again, we will make sure that we will have sustainable performance. We want to let you know that.

That's what I have to say.

MR. GROBE: Okay. Any questions?

Okay. Before we go on to the next session of the agenda, which is discussing the framework for restart checklist, I think it's appropriate for a couple comments right now.

This has been a very comprehensive presentation on the status of a variety of activities. I think over the past month we've seen a substantive change in the focus and scope on a number of the activities. And that's been the result of your assessments of what you're doing and how you're going to accomplish it. It's been the result of some input from our staff, as well as some input from

outside influences. And, I think that's very healthy.

The area as I mentioned a moment ago; many of these activities in the management performance area were clearly future tense activities. I'm eager to get into some more detail in this area, to understand specifics of what these activities look like, how you measuring them, what your expected outcomes are on specific activities, and what your personal restart criteria are going to be in these areas. And, I think this is very important.

At this time, John?

He's good. Let's move on.

I wanted to provide framework, clearly comprehensive framework for the NRC Restart Checklist. Obviously, you've got your, one of your Building Blocks here at your restart plan, specific criteria for whatever items that need to be resolved from restart, whatever items that possibly can be deferred until restart. I suspect before you're done, you already have a, many hundreds of items identified that you're going to screen, and probably several hundreds that you've probably already identified that are a result of restart.

Our research in this has to be much simpler. And it's going to have a framework that covers a number of areas. Obviously, we have to see root cause, is very important. The adequacy of structured systems and