

U.S. NUCLEAR REGULATORY COMMISSION  
FIRST ENERGY NUCLEAR OPERATING COMPANY  
BOARD MEETING

Meeting held on Wednesday, June 12, 2002, at 3:00 p.m. at the Oak Harbor High School, Oak Harbor, Ohio, taken by me Marie B. Fresch, Registered Merit Reporter, and Notary Public in and for the State of Ohio.

PANEL MEMBERS PRESENT:

U. S. NUCLEAR REGULATORY COMMISSION

John Grobe, Chairman, MC 0350 Panel  
William Dean, Vice Chairman, MC 0350 Panel  
John Jacobson, Branch Chief, Mechanical Engineering Branch, DRS  
Anthony Mendiola, Section Chief PDIII-2, NRR  
Douglas Pickett, Project Manager, NRR  
Christopher (Scott) Thomas, Senior Resident Inspector - Davis Besse  
Laura Collins, Project Engineer, Region 3  
Mel Holmberg, Metallurgist, Region 3

FIRST ENERGY NUCLEAR OPERATING COMPANY

Lew Myers, FENOC Chief Operating Officer  
Bob Schrauder  
Randy Fast  
Jim Powers  
Dave Eshelman, Director Support Services  
Howard Bergendahl, Vice President-Nuclear  
John Messina

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MR. GROBE: Good afternoon.

My name is Jack Grobe, I'm the Director of the Division Reactor Safety for the Nuclear Regulatory Commission Office in Region 3. That's our office near Chicago, Illinois. Region 3 is responsible for the oversight of the facilities, nuclear power facilities in the midwest, including the Davis-Besse facility. I also serve as the chairman of the Davis-Besse Restart Oversight Panel.

Welcome to the second meeting of the NRC Restart Oversight Panel, with members of First Energy and Davis-Besse. The purpose of the meeting today is for First Energy to update the panel on activities that have occurred and progress that has been made at Davis-Besse since the last public Restart Oversight Panel meeting in May.

Before we proceed further, I would like to introduce the NRC representatives that are here today. Here at the table on my far right, and your far left is Laura Collins.

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Laura is Project Engineer responsible for Davis-Besse in Region 3 office. On my immediate right is John Jacobson. John is the Chief of my Mechanical Engineering Branch in Region 3. On my immediate left is Bill Dean. Bill is the Deputy Director of the Division of Inspection Program

Management in our headquarters offices near Washington, D. C. Bill is also the Vice Chairman of the Oversight Panel. Next to Bill is Tony Mendiola. Tony supervises the coordination of licensing actions and activities the NRC undertakes in our headquarters offices. Next to Tony is Doug Pickett. Doug is the Licensing Project Manager, who has specific responsibility for the Davis-Besse facility. And, on my very far left is Scott Thomas. Scott is a Senior Resident Inspector who works at the Davis-Besse facility for the Nuclear Regulatory Commission every day. Jim Dyer, the Regional Administer in Region 3 and Jim Caldwell, Regional Administrator, wanted also to be here today, but due to other activities, conflicting activities, they are unable to be here.

I would like to right now recognize any public officials or representatives of public officials that are here today. If you could stand up and introduce yourself, I would appreciate it.

Do we have any public officials here today? Okay.

MR. WITT: Yes, I'm Here

Witt, County Administrator for Ottawa County.

THE COURT: Thank you, Here.

Any others?

Okay. Thank you.

Finally, I would like to thank several people that have made this meeting possible. First is Nancy Keller. Nancy is our administrative support at the Davis-Besse facility, works in the Resident Inspectors Office. Also Jan Strasma. Jan, raise your hand back there. Jan is our Public Affairs Officer in Region 3. And Rolland Lickus, our Public Affairs Officer is also here. Mr. Stucker. He's up there running the sound system. Mr. Stucker and the Oak Harbor High School have been very generous in allowing us access to this fine facility to conduct these meetings, and I appreciate that.

Our agenda today is fairly straightforward. I did not make copies of it, because it's so simple. First, we're going to conduct a business meeting between the NRC and First Energy to discuss the activities that are going on at the Davis-Besse site. First Energy has provided copies of their presentation out in the front of the auditorium.

When that dialogue is completed, I will invite members of the public to step forward with any questions that the NRC staff can address or provide any insights that they wish us to consider. First Energy is invited to respond to any questions that they desire to respond to. We're keenly interested in your thoughts. That's one of the reasons we conduct these meetings in public and provide an opportunity for public input. If you do not feel compelled to step to the microphone,

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but have something you want to share with us, the NRC staff will be available following the meeting.

And, we also have what we call feedback forms. They're forms that are preaddressed, no postage necessary, that you can write whatever comments you might want to provide to us on those forms, and drop them in the mailbox and we'll receive them.

So, there is a number of ways that as a member of the public you have an opportunity to give us input on these proceedings or any other aspect of nuclear power safety. To that end, I've changed a little bit the structure of the way we're conducting these meetings. It's difficult to conduct a business meeting in the evening. If I schedule a 7:00 meeting, these guys would have already worked for 12 hours, as would have my staff, and it's tough to have an effective meeting that time in the evening. And so, I moved the business portion of this meeting into the regular business day. It's still a public meeting and we'll accept public input. But I also decided to transcribe this meeting. And that transcription will be available on our web site and it will be publicly available in our records management system approximately 3 weeks after the meeting. In addition, because there has been a significant amount of interest in the activities at Davis-Besse, we'll be conducting a meeting this evening from 7 to 9 p.m. for any members of the public that want to come, that were unable to make it during the business day. So, we'll continue transcribing the meetings, and having evening meetings as long as public interest indicates that that's appropriate.

At this point, Bill, unless you have any additional opening comments? Okay, great. At this point, Lew, I would like to turn the meeting over to First Energy.

MR. MYERS: Thank you, Jack.

It's indeed our pleasure to be here today and discuss with you the Return to Service Plan that we, we've completed since our last meeting. My name is Lew Myers. I'm the Chief Operating Officer of the First Energy New Operating Company.

My first line is Desired Outcomes. Today we would like to demonstrate a comprehensive recovery plan to the public. We would like to demonstrate that management at First Energy Nuclear Operating Company will take strong actions needed to resolve the technical issues at our Davis-Besse plant; to operate the plant both safely and reliably; we will improve the employee confidence before we return the plant to service; and regain regulatory confidence; and, finally, most importantly, we want to receive your feedback, feedback from the public on our actions.

Page four shows the basic building blocks of our Return to Service Plan. We believe the plan is comprehensive. Consists of seven building blocks. Each building block has an arm that's here with me today. I'll introduce them in a moment. From an independent oversight standpoint, the first building block is a Restart Overview Panel. We've been very careful to put a panel together that has both regulatory expertise, industry expertise, community expertise, oversight expertise, and technical expertise in the history of this plant. We think we've put together a top notch Oversight Review Panel that monitors each of our plans as we go through the various phases of planning, discovery, implementation, and then validation. And, you'll hear us use those words.

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The plan consists of the following building blocks. First, Reactor Head Resolution Plan. We made a lot of progress there since the last meeting and Bob Schrauder today will discuss that.

The next plan is the Program Technical Compliance Plan. That's looking at our engineering programs and also our nonengineering programs in the plant to ensure that we're complying with the regulatory requirements and the industry experience. So, we're going through those programs one by one.

Finally, the Containment Extent of Condition Plan. The containment building; what is the material condition of the containment building and what was the effect of the boron that leaked out into the building on the equipment. So, we're going through each piece of equipment and Randy Fast will discuss that today. Randy is to my right here.

The Restart Action Plan. The responsibility of the site, VP Howard Bergendahl to my left, and he'll discuss that. Finally, the System Health Assurance Plan, if you will. Jim Powers to my, second to my right over here, will discuss that plan. That's to go through each one of the systems. And, he's had some help from our Plant Manager, Randy Fast, to assist in the matter to make sure those systems are in good material condition prior to bringing the plant back online.

Finally, the Restart and Post-Restart Plan. As we bring our plant back online, we want to do that in a flawless manner. We're going to be installing several modifications during this extended outage; a new reactor head and doing a lot of maintenance.

So, we've got pre-maintenance testing; we've got the head testing; and we've got all the modification testing that we have to integrate together and do in a controlled manner to bring the plant back online. And finally, we have to look at ourselves internally. The NRC had a meeting today discussing their lessons learned. Well, what are the lessons learned that we have from a management standpoint? What drove us to the situation where we, we did not get, we did not identify this leakage earlier?

So we have an, we have an integrated team put together that's going through that of industry experts, our own people, and also management experts to give us feedback on this recall. Dave Eshelman is in charge of that. With that, I'll turn over the first, the first area to Bob Schrauder.

MR. GROBE: Excuse me for just a moment. I realized late, and I apologize for this, that a member of my team was not up here. We just brought him up. I want to introduce him. Sorry about that Mel. This is Mel Holmberg. Mel is a metallurgist on our staff in Region 3. Mel was on the Augmented Inspection Team and he's also conducting inspections of the facility today. And, we'll be talking about some of the activities Mel is reviewing and I wanted him up here to have discussions and provide insight.

MR. MYERS: I'm glad you did that, because I forgot to introduce Bob Saunders is with us. He's the President of First Energy. And, Gary Leidich who I introduced earlier today, but Gary is the new Executive Officer for First Energy Nuclear Operating Company. He's returning, and this is his first week back. He came to us from an executive position from the Institute of Nuclear Power Operations. And, we welcome Gary back. With that, I would like to turn this over to Bob Schrauder for Reactor Head Resolution Oversight.

MR. SCHRAUDER: Thank you, Lew.

As Lew said, my name is Bob Schrauder. I have overall responsibilities for replacing your reactor vessel head at Davis-Besse. By way of background, I'm an engineer by trade. I have 25 years experience in the nuclear industry at various positions, including the Director of Engineering and Plant Manager. Currently, I'm the Director of Life Cycle Management. What that means is, I'm in charge of all the large projects for all the FENOC facilities, as well as the long term enhancements to our plants. The last time we got together, our primary option for restoring the plant to safe operating condition was to repair the existing Davis-Besse head. During the course of that meeting, there was exhibited a fair amount of anxiety, I would say, between both the NRC on that option and members of the public. A lot of questions were raised as to why wouldn't we just replace the reactor vessel head versus repair the existing one.

So, while my colleagues were busy designing a safe and effective repair, I was tasked with looking for a replacement head for the Davis-Besse plant. Next slide, shows an overhead of some of the reactor vessel heads that I'm talking about today. Since the last meeting, we have located essentially a like-for-like replacement head from a never completed nuclear power plant in Midland, Michigan. We've decided therefore that our best option for returning the plant to a safe operating condition, and for safe operations going forward, will be for Davis-Besse to replace its existing reactor vessel head with this replacement head. Now, this isn't the cheapest option, of course, nor is it the shortest option, but we are convinced it is the best option and gives the highest degree of confidence to both the regulator, ourselves and the public.

Next couple slides, please. Couple of bullets I want to talk about. Before we bought the head, we had to assure ourselves that it was in fact usable at Davis-Besse. We have done that. Physically, it's nearly a perfect fit. I'll discuss a couple of minor differences between that head and our existing head. That head was manufactured by the same company as the Davis-Besse head; Babcock and Wilcox. It is unused. It's designed to the same requirements as Davis-Besse. It's built to the same industry design codes and made out of the same materials.

Now, just a couple of the physical differences that I talk about are on the following page. There are, the reactor vessel head must fit on the reactor precisely in order for the control rods to effectively move through the control nozzles and into the core. To make sure that the head fits precisely on the vessel, there are what are known as keyways. Keyways must fit within a very tight tolerance in order to assure that the head is perfectly aligned. Each of these keyways is specifically fit to the vessel that it's intended to serve. And although they are in very close approximation, you have to make sure that it is in fact in the precise location that is needed on your reactor vessel head. So, through some very careful and precise measurements, we determined that of the four keyways on the Midland head, several of the surfaces need to be very slightly machined to fit our reactor vessel head. What you see up on the screen there is a picture of those keyways. The one picture shows just a, how it sits. The other picture, here on my right, shows two surfaces that the key fits in.

So, there are eight of those surfaces, four keyways, eight surfaces. Four of those surfaces had to have between 3 and 5 thousandths of an inch shaved off of them to make sure that they fit the keys on our vessel. The other minor difference was the O-ring. The O-ring is the sealing mechanism of the reactor vessel head flange to the vessel flange itself. There is a set of two sealing rings that go around it. The ones on the Davis-Besse plant are .5 inches in diameter. The ones on the Midland head are .455 inches.

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We have looked at that difference. We have confirmed that it effectively seals on our reactor vessel and we will be able to verify that when we -- there is a detection system that will enable us to tell for sure once we put the vessel head on and fill it with water, that they expect it to seal, as we expect it to do.

Now, as I said, we didn't want to purchase this reactor vessel head until we made sure it met all of the codes and standards. We put the head through a series of intricate inspections to make sure that its storage in the Midland containment has not in any way affected its capabilities. So, we are examining virtually all of the welds on this reactor vessel head. We're examining all of the nozzles in the head, making sure that they are in excellent condition for us to put into our facility. Now, we know that all these exams were done on this head in the past and it was accepted for use as a code compliment at a nuclear power plant; however, we want to make sure again that the storage of this vessel over the last 17 or 18 years has not in any way affected the welds. We've already started on those. We are through with many of them, but those will continue over the next several weeks.

Now, in order to install the head at the Davis-Besse plant and to remove it from the Midland plant, the containment building where the reactor vessel is held does have an equipment hatch where you move large pieces of equipment in and out of the containment; however, that containment, or that equipment hatch is not large enough to fit this reactor vessel head. Reactor vessel head itself is about 17 feet in diameter, and it's about 9 feet tall. It won't fit through that opening. So, what we're going to do is put a temporary opening in our containment building, about a 20 foot by 20 foot opening. We'll move our old reactor vessel head out and move the new reactor vessel head in. Place it on the reactor vessel. And then we will restore our containment building to its original design capabilities. All of this work we expect to be completed sometime during the fourth quarter of 2002.

MR. JACOBSON: This is a good time I think briefly for us to discuss some of your inspection plans on this particular part of the project. For the head replacement activities, we're taking a three-prong approach on the head itself. The first part of it is to go out to Midland site, which we dispatched an inspector today to go out to Midland, and he's going to be reviewing some of the nondestructive examinations and inspections we're doing out there, as well as review some of the documentation of inspections.

The other part of it is going to be a review of the documentation that supports the quote compliance of the head. And lastly, review and inspect both your opening of the containment, as well as the restoration of the containment. These are only a few of the inspections we're going to do, but specifically with respect to the head, those are three phases of the inspection that we've already begun.

MR. GROBE: Would you describe what sort of testing you plan for the containment, containment liner after you restore that liner, what sort of testing you're planning?

MR. SCHRAUDER: Our containment building at Davis-Besse, as you know, Jack, is two separate structures; one is the pressure vessel and the other, what most people see, the concrete around the pressure vessel is the shield portion of that. When we restore the containment, the pressure vessel itself is a steel vessel. It will be cut open and then a plate will be rewelded back in place. We'll then do an examination of that weld to make sure that the weld is good, has no flaws in it. Then, we'll do a leak test on the opening, which will be a --

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right now the plan is to do what's called a vacuum box test on it, where we will have an enclosure around the area that has been repaired and we'll do a test to verify that it is in fact not leaking. Concrete itself will be checked to assure appropriate curing of concrete also.

MR. JACOBSON: A point of clarification; I know you're replacing the head, but it's my understanding that you're going to reuse the existing surface structure that mounts to the head?

MR. SCHRAUDER: That is correct. The upper portion of the surface structure will be reused from the Davis-Besse existing head.

MR. JACOBSON: Incorporate some mods?

MR. SCHRAUDER: The inspection modification for the surface structure, actually the lower portion of the surface structure, the supporting skirt, and that modification is being made on the Midland head. We are going to use that lower portion. And those inspection modifications will be performed on that head prior to its shipment to Davis-Besse.

MR. JACOBSON: Thank you.

MR. MYERS: I think it's important that the public understand that modification is designed to allow us to inspect the head again in the future in a very easy manner. Our previous head did not have that modification, and it made inspection difficult.

MR. GROBE: We've been evaluating the requirements for testing of the containment vessel after you performed this modification or restoration activity, I guess. We haven't concluded yet the type of testing, leak rate test you are referring to is a Type C leak rate integrated test. We haven't concluded that that conforms with the requirements. We are aware that there is a number of other plants in the midwest that have performed these kinds of operations at their facility and replaced large forms in their containment and in each case they did a Type A leak rate integrated test. We're evaluating whether or not that's the required test and we'll continue the dialogue on that.

MR. SCHRAUDER: We'll certainly do whatever we have to do, Jack, to verify that that repair is good and that containment itself is satisfactory.

MR. DEAN: Bob, you mentioned that the keyways may or may not be a technical change. Are there any other challenge that you see relative to bringing in the head?

MR. SCHRAUDER: I don't believe that the keyways are necessarily a challenge. We've made the measurements. We know what needs to be done. And they do need to be shaved very slightly, like I said, 3 to 5 mills off of that. And, other than completing the nondestructive exams, there is, the service structure itself has about a 5/8 difference in height, and where it sits on the lower skirt. And we have to make sure that all of our tooling systems and cable and everything meets up. We're not expecting that to be a problem, but it's the only other difference on that head that we will need to address and make sure that it has no problem.

MR. GROBE: Could you describe for us the progress on the nondestructive examination at Midland?

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MR. SCHRAUDER: Yes. The large weld. If you look at this picture, you see it looks like one piece, but it's actually two pieces. The domed portion and then the flanged portion. There is one large weld that welds that dome to the flange. We have completed a radiograph on that weld to verify that it is good. And it is good. We know that that's a good weld. The other exams we're going to do are radiograph of the flange to nozzle. You see the nozzles coming out of the head there? There is a flange that sits on top of that nozzle. That's your control rod drive mechanism comes down on. Each of those welds are in the process of being radiographed. We'll do a big particle exam of the large dome to flange weld. We'll do a visual inspection of the entire head surface. We'll UT that flange to dome weld again, making sure that there are no flaws in the weld. We'll PT the nozzle to flange weld. That's a dye penetrant test; again, for surface crack verification. We'll also exam what's called the J-groove weld on the nozzle where they will fit into the vessel on the weld underneath to make sure that is a good weld. And we're also going to perform an ultrasonic test examination of the nozzles themselves to make sure that there are no cracks in those. The way we've broken these examinations up are into three parts. One is to augment our co-data package to make sure that we have all the required records of tests on that. The other set of tests is for our in-service inspection preservice examination. And then the third set are augmented inspection, we decided we need to do again, to verify that the storage of this reactor vessel head had no deleterious effects on it.

MR. MYERS: Jack, you mentioned a lot of other plants out west?

MR. GROBE: I'm sorry?

MR. MYERS: You mentioned a lot of other plants in the midwest have experienced a large number of containment similar to this. Bob, why don't you talk about the experience level that we're bringing in?

MR. SCHRAUDER: Well, we've brought in Bechtel Power Corporation to do the containment and restoration for us. They have done nearly all of the containment openings and restorations in the United States, and they've done several overseas also. So, they certainly are very experienced in this. Also brought in Framatone to help us do the inspections on the head. And they also are very experienced, capable contractors for us.

MR. GROBE: Do you have any challenges completing the radiographs that you have ongoing right now?

MR. SCHRAUDER: Like I said, the big weld, the dome flange weld, we had success with. On the nozzle to the, flange to nozzle welds, there is 69 of those nozzles in the reactor vessel head. We have completed the radiographs on all of those. 52 of them, 52 of the 69 came out very good, easy to read. 17 of them have some type of an indication that we're having to relook at, reshoot. We believe right now that it is a cure density issue, but we're going to do another set of radiographs on that. Then we'll do a manual UT to make sure that there are no indications in that weld, and verify that we have a good weld there. But we do have some more work to do on those inspections.

MR. PICKETT: We understand from previous meetings that the Midland head has some rust on the head. Could you show us the drawing where the rust is identified and what is the extent?



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MR. SCHRAUDER: Well, if you look at the flange there, the large flange that comes down, right where that circle is on there, that's the dome and the flange. That is carbon steel. And, it does have some surface rust on it. There is not much pitting or anything. It is just surface rust on, being in relatively not completely dry environment. So, there is nothing unexpected in the fact that there is some surface rust on the head. We'll clean all that rust off before its used.

MR. PICKETT: Well, was the rust limited to just the flange area on the outer perimeter or throughout the surface?

MR. SCHRAUDER: Any of the exposed carbon steel has rust on it, surface rust; and we will thoroughly clean all that, again, before shipment of the head.

MR. PICKETT: So, you haven't completed that work?

MR. SCHRAUDER: No, we have not.

MR. GROBE: I have one other question that affects our staff at headquarters. Are there any licensing activities that you expect are necessary, any co-relief requests?

MR. SCHRAUDER: At this time, we don't expect any new license requests or documents to come in. We do have a couple of executive or relief requests in our in-service inspection program that we have been granted in our previous inspection intervals and they will need to apply to this head, as they needed to apply to our existing head, but we have not yet identified any new NRC approvals that we need.

MR. GROBE: Those existing relief requests don't need to be modified in any way?

MR. SCHRAUDER: Well, we're looking at those to see. We will probably resubmit them just to make it clear they are for this head. The specific weld identification number may be different on those requests. So, we will either update that or just submit a new replacement request for them.

MR. GROBE: Any other questions from the NRC staff on the head?

MR. DEAN: The only other question I have is, obviously, there is a certain amount of records that need to exist in order to provide pedigree, as you will, for this. Any difficulties or problems relative to the records that exist on the existing Midland head?

MR. SCHRAUDER: We have been able to compile the original co-data package for this head with the exception of the film for the radiographs. We don't have that film. And that was one of the reasons that we, although we had a signed off code data form that said they had been done, they had been accepted; they are not a part of the required plant life record. And, we wanted that record for our files nonetheless. So, that's one of the reasons I'm supplementing the code data package, as I said, and that's something that will be specifically radiographs on those welds.

MR. GROBE: Thanks, Bill. You just sparked another question in my mind. Bob, thank you also. The code data package that's being put together; what sort of oversight does quality

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assurance have over that package? What's the process by which you go to accept that package?

MR. SCHRAUDER: We have sent two of our teams down to Lynchburg to verify that the package is complete and meets our needs. So, both of our procurement people and our local people have examined those records themselves.

MR. GROBE: When do you expect those reviews of the code data package to be complete?

MR. SCHRAUDER: Well, they will, they will be complete certainly within the next month; probably within the next couple of weeks. I understand that's something that you folks will want to look at also.

MR. GROBE: Right.

MR. SCHRAUDER: I'll have to get back to you, Jack. They may be in a condition now that they will be able to look at them.

MR. GROBE: Okay.

MR. JACOBSON: What's the role of authorized inspector in this whole thing?

MR. SCHRAUDER: We are working very close with our authorized nuclear inspector. He has been down to Midland. We have gone through the plant with him. And we intend to verify -- (inaudible/asked to repeat)

MR. SCHRAUDER: I'm sorry. The question was, what role the Authorized Nuclear Inspector has in this activity; and we have had him involved from the very beginning of our, our procurement effort on this head. He has been to Midland to examine the heads and to witness some of the nondestructive exams that we're doing and we have gone over our plans with him to verify, that we have put together to verify that this original end stamp on this reactor vessel head is still valid. So, he has been very involved with us.

MR. JACOBSON: For those folks that don't understand or know what we're talking about with the Authorized Nuclear Inspector; this is required by the codes and it's essentially a third party, independent party, that reviews what's been done in this component to assure code compliance.

MR. MENDIOLA: I have a few questions. Is the head, how about the head, nuts and bolts, and possibly the lifting devices associated with that head?

MR. SCHRAUDER: We have, by our contract with consumers on the head, we have the rights to everything associated with the head that we want. That is, obviously the nozzles which are in there, are integral to the head. The control rod drive mechanisms have been removed from this reactor vessel head, so we'll reuse our existing drive mechanisms. All the lifting devices we have access to. The service structure, we can take if we choose to. All of the reactor vessel studs; we, in fact, have already shipped. So, we have purchased them as part of this. Virtually anything associated with the head that we wanted, was included with the price that we paid for it.

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MR. GROBE: Any other questions? Very good. Thanks, Bob.

MR. SCHRAUDER: Thank you.

MR. FAST: Good afternoon. My name is Randy Fast. I'm the Plant Manager at Davis-Besse. I'm pleased to present our plant for inspection to the containment building. Our team is committed to a comprehensive plan to support safe, reliable restart of the Davis-Besse facility. As you see in the photograph here, the most prominent structure is the cooling tower. It's the large 550 foot tall item you see there. However, what we're going to talk about today, in the middle of the page is the containment structure. 240 feet tall, about 2.4 million cubic feet. That is the heart of the plant. And there resides the reactor coolant system. What we're doing as part of our containment inspection plan is we have assembled a team of 24 highly qualified engineers. These engineers have gone through a special certification program, according to the American Society of Mechanical Engineers to obtain VT-2 qualification. The reason that we did that was to ensure that we had consistency in our approach in the inspections that were ongoing. We have three specific engineering inspection plans. They include an alloy 600 threaded and bolted plan, the general systems structure and components plan, and then under reactor vessel inspection plan.

The purpose of these inspections is to look at boric acid degradation, and we want to look at the general material conditions of containment. The scope not only includes the reactor coolant system, but includes all of the components within that structure. Next slide, please.

MR. GROBE: Before you go on, Randy. Mel was out inspecting earlier this week and identified one area of containment that was not included in there. I want to understand why that is. It's the inner surface of the containment liner itself down low in the containment where the base mat meets the board, base mat meets the container liner. Would you talk a little about that?

MR. FAST: Yeah, I want to make sure we understand. We had already identified the forecast, and control program engineer had internal discussions about that. As a matter of fact, we had gone to D. C. Cook to look at lessons learned; and part of our oversight panel as well identified this. So, we had three other areas where these were active topics of discussion.

Now, obviously, Mel came to the site earlier in the week and Tim Chambers, our Project Manager, was doing those walkdowns. He did identify those areas. We had not had a chance to fully inspect those areas, but that was to be included as part of our plan. We appreciate Mel's contribution, but we had in fact already had a conditional report identified for this action.

MR. GROBE: That's good to be one step ahead of us.

MR. FAST: Yes, sir.

MR. GROBE: In following up on that issue, I understand, I sat in your morning meeting this morning and heard a discussion of the identification of some corrosion in that area on the containment liner. I was a little concerned about the depth at which your staff challenged whether or not that corrosion was adequately evaluated to determine what impact it might have had on the containment vessel integrity. I read your condition report and it indicates that the integrity is intact and the equipment is operable. I was wondering if you could help me understand, recognizing that there is a very small gap, could be as small as a 16th or less of an

inch between that concrete and containment liner, why you believe that the, an inspection of the interface of the concrete and steel is sufficient? Why inspection not further down in that cap is necessary?

MR. POWERS: I'll handle that one, Jack. What we're looking at today is the initial operability determination assessment of the condition of the liner. And we've looked at the past evaluations that have been done with the liner and with potential corrosion. There is, have been assessments done in the past, so it's not a new issue for technical evaluation. The operability determinations that first look at it and begins the process of a much more in-depth investigation under corrective action program, so we'll continue to go into progressive detail to evaluate that entire, that vessel system and its structural integrity. So, we'll start down that path.

MR. GROBE: I appreciate that.

MR. JACOBSON: I did discuss this with members of the design engineering group, and you're right, that you're progressing down the path of environment operability and looking at structural integrity. My concern was more for, as a containment function, making sure that there is no actual perforation. Certainly there is enough mass of steel, where even with the relatively large hole may have structural integrity, per se, but not boundary integrity, which was my area I was interested in. So, I didn't get the feeling that your staff was pursuing any options to confirm there wasn't a perforation of the liner.

MR. POWERS: Ultimately, that will be assessed. That will be a part of our evaluation in determining that containment integrity is sound; both the structural supporting function of it as well as the pressure integrity. Part of our corrective action process will ensure the total functionality of the containment is sound.

MR. MYERS: It was also brought up by one of our CNRB members, which is Oversight Review Board, so one of those members had brought this issue up some time ago and we were looking at that too. You wrote us a letter about it.

MR. GROBE: Jim, where would you get --

MR. MYERS: We have work to do there.

MR. GROBE: I'm sorry. Where would you expect the more significant corrosion to be? Would you expect it at the surface where the concrete meets the steel or would you expect it below that surface?

MR. POWERS: We're looking at a couple of areas. There is, there is areas there where ground water has come up alongside the containment and we're evaluating that on the outside. And when we look at the top of the, the specific area on the inside where the top of the containment to the concrete boundary, there is also corrosion there. My initial thought is that oxygen is more prevalent in that area. You may see more significant corrosion locally at the top, but we need to go further down below, Jack, and evaluate the complete conditions within the concrete. One of the things we've done on the extended condition, we've talked a little earlier about going to the Cook plant and gleaning their lessons learned in this area. They had some questions on their containment very similar, and they did some extensive studies. We

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are getting contact with the specialists that did that for them to evaluate whether, whether the corrosion at the surface represents the worst of it and what mechanisms we can go by to verify all the liner below, within the concrete. So, our intent is to verify the pressure integrity and structural integrity below the concrete.

MR. GROBE: Okay. I'm not a metallurgist, but I guess I would like to invite Mel to comment on where he would expect, given the set of conditions, which was a cool containment shell, and warmer environment with boric acid, carry with moisture in the atmosphere, it would condense on the shell. Mel, do you have some thoughts?

MR. HOLMBERG: Yeah, based on experience, I'm familiar with what happened to Cook and some other plants that had corrosion in the liner. It is not necessarily the surface of the corrosion is in fact the worst. Generally, what happens is as the gap is opened up, it forms a collection point for liquid, which then does establish some level that usually the gap closes up. There should be a damper. At least it's been experienced at other sites, such that there is a liquid level established in that gap; and the interface of the air/water interface typically, that has been the range they found more substantial corrosion. Not sophisticated terms to determine that level. Some people have put a dipstick down and established that level. That's how they know after they heavily concreted, that in fact it corresponds with where they also found in deepest areas of pitting corrosion. So, it's been my experience that no surface would not be to inspect the most corrosion in that gap.

MR. GROBE: Your experience in the past, Mel, has been simply moisture, not moisture might have boric acid in it?

MR. HOLMBERG: That's generally true, yes.

MR. GROBE: I'm concerned with two points. First off, have you been to refuel; understood that was initially scheduled for sometime today? And at least containment integrity required when you do refuel out of the vessel into the other storage locations?

MR. POWERS: Yes.

MR. GROBE: The operations staff evaluated, has documented NCR based on conversations with the people inspecting the containment; the corrosion that they could see was characterized as surface corrosion. And that certainly would be true with any corrosion and that begins on the surface, but, and basically concluded that the containment was operable. I don't believe that I'm comfortable with the level of technical rigor that went into that determination. Did these operators involve any of your metallurgists or people that were familiar with this type of corrosion as it would occur in making that determination?

MR. ESHELMAN: I would like to answer that. You mentioned first about the liner challenge. When this report was brought to the supervisor, to the senior reactor operator, he's required to make an operability determination. So, through discussions, initial discussions, it was determined that based on the best evidence available, that yes, we were still operable.

However, the challenge also occurred that that is when inoperability determination was asked for by the senior reactor operator. What that is doing is asking engineering to provide a rigorous justification for what was originally determined to be operable. So, when we went into

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the morning meeting, we were carrying on our daily report, an operability determination that was due as mentioned about noon today. So, that rigor and challenge was provided by the operations staff. The initial determinations made on best available information.

MR. GROBE: The question I asked, David, was whether or not any of your engineers were consulted in making that decision? Engineers would be familiar with this kind of corrosion, and that would have been, I hope, information to be available, which your engineering staff would have been available whatever time, day or night, that you might need them. Were they consulted in making this determination?

MR. POWERS: I believe they were, Jack. That the engineers prepared the operability determination, participating in that function, and helped for that technical evaluation.

MR. GROBE: We'll probably be talking more about this, because I'm still concerned. As I said, the documentation might not be all the consideration that went into this, but the corrosion identified was surface corrosion and vessel's operability. However, due to the uncertainty of the extent of the condition in the gap, a detailed review needs to be completed. If the operations staff were uncertain, I'm not sure how they concluded it was operable. This doesn't seem quite right to me. And we'll probably continue dialogueing on this.

MR. FAST: Under your concern, we'll continue dialogue. As well, just a point of clarification on the containment integrity. Requirements to refuel, the approach, there were some minor differences in the requirements for the containment in modes 1, 2, 3, and 4, and the requirements for a mode 5 and 6, so there are some special issues as well here. I believe that was the, some of the bases for our determination, but we can continue this dialogue outside and make sure that your questions are fully answered.

MR. GROBE: The way I read this is the person that made this conclusion was based on what I can see. I don't have a problem with it, but I don't know, and I'm not sure that's the right safety standard for people making operability determination.

MR. BERGENDAHL: We'll get the right people together and explain whatever decisions they make.

MR. GROBE: Okay.

MR. JACOBSON: This program focuses exclusively on, within containment, any damage that may have occurred because of the boric acid leakage. What are you doing outside containment for those systems that contain boric?

MR. FAST: For this program, our principle focus is inside the building; however, for the in-service inspection and return to service, all of the reactor coolant system, both inside and the supporting systems outside of containment will be evaluated.

MR. JACOBSON: Will they be evaluated by what, visual inspections? What do you mean evaluated?

MR. FAST: There will be a walkdown, look for evidence of leakage in accordance with our inspection plan by qualified inspectors.

MR. JACOBSON: So, similar to what you've done before?

MR. FAST: That's correct.

MR. JACOBSON: Thank you.

MR. MYERS: That is in our system, so you'll be involved.

MR. GROBE: You can structure this any way you want. It just seemed odd to us, you have indicated this team of VT-2 qualified inspectors, and it seemed odd they weren't going to inspect all components that carried boric water, whether it's inside container or outside. Are you using some system engineer to do system assurance or is this team of VT-2 qualified inspectors going to be looking at those systems under your system assurance?

MR. FAST: What I would like to identify, Jack, is that the individuals that were specifically part of the inspection plan for containment consisted of system engineers and design engineers in the disciplines of civil, electrical, mechanical and nuclear. The system assurance plan focuses around the system help with the system engineer, but those same system engineers that have those systems are part of the qualified population with the VT-2.

MR. GROBE: Okay.

MR. MYERS: So, I believe the answer is we usually use qualified people.

MR. GROBE: Okay. All right.

MR. HOLMBERG: While we're on the subject, before we go on to VT-2 qualified people, one of the objectives in this first portion of my inspection is to look at the quality of the inspections that are going on. And to that end, you will establish that the person doing it will be VT-2 qualified. However, out of the 28 people that are, have done the inspections so far, five of those have prior experience. So, you've got 23 people that have not been VT-2 qualified before. And, of those folks, is there confidence that this lack of experience, if you will, will not produce any, any problems for you in terms of understanding the quality of the inspections that are going on?

MR. FAST: I understand your concern revolves around the fact of the experience in some of these individuals. What I believe that we have is a team that is working well as a team, and they are highly reliant on one another to peer check and provide consultation. I have personally witnessed those engineers during those evaluations, and I see them in groups of 3, 4 and 5 in those walkdown efforts. So, the way that I would answer your question is that, as opposed to a single individual that's making that call, we are using a team approach, so that we can ensure that we've got that peer check and we've got the back-up from the other individuals on the team.

MR. HOLMBERG: Okay, thank you. The second area example of their probing in respect to quality is in terms of establishing a standard, if you will, of the quality of exam. For one of your plans, you did establish a standard of quality for exam, being able to read characters at a certain height, and under certain lighting conditions. With the other two plants, no such standard exists for the quality of the exam itself. I wonder if you could speak to that.

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MR. FAST: I don't have any specific response; however, we appreciate your input and we'll certainly take it into consideration.

MR. MENDIOLA: I can ask a follow-up question about the VT-2 personnel. Were these people qualified and certified, if you will, in the normal method of qualifying VT-2 personnel or were they put, if you will, in some sort of special program to conduct this inspection?

MR. FAST: We put together a training program that meets the requirements in accordance with the American Society of Mechanical Engineers, and training was provided on station and the individuals went through a qualification process in order to obtain that VT-2 certification. To my knowledge, that's not unlike other plants in their qualification process.

MR. MENDIOLA: Okay.

MR. GROBE: I have more of a structural question. You have your Return to Service Plan, and then you have implementing procedure or plans for each of the building blocks, and then under that are detailed procedures for each activity. Are all of these plans and procedures controlled under your quality assurance program?

MR. FAST: I can't verify right now on the fly that they are. We're still developing that restart plan. We put the shell of the plan together, but the idea will be for us to go through and align with you those procedures, startup procedures, evaluation procedures, and ensure that they meet the highest standards in the industry.

MR. GROBE: I'm not sure I was clear in my question. We've received, we received Return to Service Plan on the docket, and that has a set of reviews and improvements. And that certainly is a document that describes activities that affect quality. And then there is implementing procedures, several tiers of implementing procedures. And I've seen a number of those have already been signed off and issued to the field. Are each of these documents controlled under your quality assurance program, meaning that tier five requires certain steps?

MR. FAST: The inspection plans, those specific to the inspection are not. However, the return to service are principally in the post maintenance, post modification and the operations specific procedures and they are controlled.

MR. GROBE: Why wouldn't the inspection plans be quality procedures? Not that they're not quality, but why wouldn't they be controlled under the quality assurance program?

MR. MYERS: Inspection plan itself?

MR. GROBE: Yeah. Maybe we're not communicating. I'll keep working on it.

MR. POWERS: The inspection plan is prepared by procedures, as a controlled product that we prepare; and it's status of quality we go on and evaluate and get back to you on that one.

MR. HOLMBERG: For example, one thing I do know is procedure that implements the plan, for instance, does not require adherence to the plan. And there is no other, as far as I know, guidance documents other than the one that was given to me today. So, it's just an example.



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There is not a requirement to adhere to a plan in the guide and procedure that tells you how to develop a plan.

MR. MYERS: Typically, our plans do routine operation, and our plans would not be under a quality program as a plan, but the implementing procedures would be. I need to understand that better.

MR. GROBE: I think we do too. We'll continue dialogueing on this. What we want to make sure is you have appropriate rigor that people are required to follow the procedures and plans you developed. That these plans aren't just their expectations.

MR. BERGENDAHL: That's correct. Their plan is oversight and we can step through that to show you this.

MR. MYERS: Then we use our quality control to make --

MR. HOLMBERG: That's where I want to stop you. The plans are actually controlling the work, so it is your ends document. There is no lower level procedure that tells people how to do the inspection. That's what I'm, that's my point. There is no procedure that's implemented by the plan. I wouldn't, if it was done that way, I, we wouldn't be having this discussion, but I think you have a procedure that we're following.

MR. MYERS: We understand the issue now. Okay. Okay. We'll look at that.

MR. GROBE: This could only be a vernacular issue, but it's an important one.

MR. MYERS: Yeah, I understand.

MR. GROBE: Maybe we'll have the lawyer resolve this issue.

MR. FAST: Excellent suggestion.

MR. THOMAS: I want to be sure on what you said earlier, on the system lockdowns for the systems tech. (inaudible/requested he repeat)

MR. THOMAS: Earlier, you spoke to, a little bit about the system, about the assurance plan; and I wanted to be clear on the specific point of the walkdowns of the systems that contain boric acid on the outside containment. You stated that those would be done per the system, per the assurance plan. Was that a correct statement?

MR. FAST: Well, it's actually, there are some systems, such as some of the water treatment systems, that handle radioactive waste and whatnot that are not part of system called Assurance Plan, and those do contain borated water. The systems that directly interface with the reactor coolant system, such as decays makeup and whatnot, are what those systems are that are under review. So I don't have the --

MR. THOMAS: But the clarification I wanted was, will they be physically walkdown by a system engineer or an inspector to verify that they aren't subject to the same type of corrosion as was found on the vessel?

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MR. FAST: All of our systems will be walked down thoroughly as part of our restart plan execution.

MR. THOMAS: Including the one outside the containment?

MR. FAST: That is correct.

MR. THOMAS: Thank you.

MR. FAST: Just thought we might have a little fun. We have a picture here. I was in containment yesterday as part of our plant cleanup day. It really is a great opportunity for the plant employees to get together. We had folks working in containment in our office facilities and in our turbine building and in our water treatment systems and our circulating water systems, throughout the facility out on the grounds. I was able to capture a couple of pictures. Here's a couple of our plant workers, actually climbing the ladder on the side of the service structure. And we do have activities that are still supporting, as Bob Schrauder identified, our head replacement plans. So, we have another picture, if you move to the next one. These are a couple of our workers on top of the service structure. And we still have a number of control rod driving, control rod driving mechanisms that are being removed in preparation for the replacement activity. The next picture is one of the inspection programs that I talked about, was the under vessel inspection. And this is really some new territory with the industry. And really exhaustively looking at the condition under vessel.

Under vessel represents high radiation conditions, we partnered to develop some new technology. We've been able to use this in the last about 60 days or so. This is a permanent magnet crawler. It's remotely deployed under vessel, and it runs, right now you see it in an inverted position. It has a camera. And that's how we were able to fully videograph the underside of the vessel. Subsequently, we removed additional insulation, and did some additional cleaning and water brush and VT-2 examination. So we are, this is some of the new technology that we put in place to assure ourselves we fully understand the condition of our, in this case, reactor vessel. The last picture here is just, as we talked about, the total structure is about 285 feet. 45 feet of it is below grade elevation. 2.4 million cubic feet. We broke those into elevations. This is the 603 foot elevation. This is where the head is actually sitting on the reactor vessel stand, and broken into a grid; that way we can clearly identify the teams of engineers and their areas of responsibility within the containment. So, we see here how we develop some maps to create those specific areas.

MR. MYERS: While we are talking about this area of inspection, it wouldn't be one person, it would be a team of individuals.

MR. FAST: That's correct.

MR. MYERS: That's where you get your peer check and they do that as a group, experiencing.

MR. FAST: That concludes my presentation. Are there any additional questions?

MR. DEAN: Randy, could you describe to us accumulated boron positions that you all have found and what the extent has been and what's been necessary to clean those up.

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MR. FAST: I would like to understand a little more clearly the length and breadth of your question. One of the things that we do at the onset of the refueling outage is go into the containment building and do a surface decontamination, so some of the areas that were impacted were cleaned up very early during this refueling outage. However, as we've done additional inspections, we've found boric acid throughout the containment and there are areas that are under remediation and cleanup inside of the duct work and whatnot. So, I can not answer in specific terms what that quantity represented; however, there was some superficial amount of boron throughout the containment. Many of those areas are in the process of being decontaminated, cleaned up at this time.

MR. GROBE: Would you give us an example or two of any damage that was identified by boric acid pressure?

MR. FAST: I don't have any photographs, but I'll provide you at least, try to provide some visual clarity, an area that is most pronounced; and that is the area where you come in through the personnel airlock at the 603 foot elevation. It's an area where the service waterlines run in the overhead. Those service waterlines run typically around 70 degrees and they create an environment where condensation can create then the fluid, as the liquid or the moisture that's in the environment is collected, you have some boric acid that runs down onto electrical panels, onto some conduit, some surface components; in one case, there is a recirculation ventilation duct that had been, you can see signs of wastage on the surface, actually through a wall, and that will be replaced. Another area that had significant impact was our containment air coolers. The containment air coolers have a common duct. Those three are cooled by that service water, and they provide cooling and recirculation of air post accident. Those areas had quite a bit of accumulation of boric acid. The common plenum has been completely cleaned and has been preserved and recoated. However, there is still some existing surface rust. Those need to be additionally cleaned, evaluated, and we'll have corrective actions that are part of the condition reporting process, which was the process that we used as we collected data from those inspections.

MR. MYERS: When you talk about the cleaning, this is not a small room.

MR. FAST: It's about a tractor/trailer size duct work column that feeds into each of the three containment coolers. Myself and Lew have been inside that duct while it was being cleaned and then subsequently looked at it after it's been recoated.

MR. GROBE: The cable fan covers what you were talking about. You said they're next to the personnel access to containment?

MR. FAST: That's one example. There are others and those are all looked at. I'm just trying to provide you a visual in the area that is really some of the worst that you might see in containment.

MR. GROBE: Could you characterize, are those easily visible by people going in and out of containment?

MR. FAST: Those would be in a normal pathway from the personnel airlock to the reactor vessel head, would be a normal point of egress for the containment building. So, it would be expected those would be in a normal line of sight, if they would have been identified.

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MR. GROBE: Was it acceptable that auxiliary operators and other personnel that traverse this area, that they wouldn't notice that corrosion through all this?

MR. FAST: Jack, what I can tell you, it was certainly not acceptable for me, for our team; and I have certainly taken the managers in containment and shown them those areas, as well challenged our managers and our leaders at the plant to go in and look at the reactor vessel head. A group of 17 of us went into the vessel, so we could see the condition of the plant. An important part of learning the proper standards for operation is getting out in the field and looking. That is my expectation and is part of our action to work toward.

MR. GROBE: I think that's very important; what I refer to as a teachable moment. There was another one recently that concerned me. Again, it involved your operators and decisions on operability. This had to do with a through hole, pinhole leak in an elbow, one-inch line that came off of your KE removal piping. I think it's roughly a 14-inch pipe with a one-inch line and it was a small pinhole leak from an elbow. It was a situation where the leak had begun and was noticed, and that was great. Again, I want to understand, the operators initially concluded that this problem doesn't affect operability. And then later on, your engineers got involved and concluded that it did in fact affect operability. Could you help me understand what role the engineers had in the initial decision on operability and how you got the situation where your operators called it one day operable and engineering came back a couple days later and said huh-hu.

MR. FAST: There is a bit of a case study there, Jack. That was initially identified, it's a crack in a weld, not actually a pinhole leak through an elbow.

MR. GROBE: Okay.

MR. FAST: And it was identified as a minor leak by a nonlicensed operator on rounds, which we, the behavior that we expect; they're identifying those problems. A condition report was written. And the operation staff, which has license responsibility, made the call, or asked for engineering help as appropriate. Our licensed operator staff did not ask for engineering help. Based on the review that was done in the initial estimation of the leak, it was minor in nature; however, it did progress fairly quickly. We subsequently asked for engineering to help in the determination of what the operable condition was and we subsequently declared that area inoperable. Does that as well meet our standards of excellence? I will tell you that those are as well, teachable moments.

MR. MYERS: We thought initially when discussing this leak, we said it was very, very small. And if there was any increases in significance, we were to immediately declare the system inoperable. Is that correct?

MR. FAST: That is correct.

MR. MYERS: I think that's what we did.

MR. FAST: As well I know that our operations manager personally went out with the shift manager and evaluated the condition real time as it was identified; as well through our normal communications process, I was notified of the condition.

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MR. GROBE: When you said this was another teachable moment, how did you use this as an example?

MR. FAST: It's opportunity to build conservatism into the, what we would like our shift managers to understand is that we have a team of people at Davis-Besse that can support one another, and no one individual should bear complete responsibility without gaining input from others. And so, although by license, the senior reactor operator, the shift manager is responsible for the operability call, our expectation is that the team work together to resolve issues and make the best determination.

MR. BERGENDAHL: We've built in checks and balances, so that we know when anybody has to make calls like that, there is a follow-up and review by the management team and the engineering staff.

MR. MYERS: For example, that morning I think we went back and put the hatch back on, didn't we?

MR. BERGENDAHL: We took several actions.

MR. MYERS: We took several actions as soon as we found that situation. As I say, we're more conservative now for that reason.

MR. ESHELMAN: That was a very good teachable moment for that management team. It was during that meeting where the challenge came, specifically Lew was very involved with the challenge and the team learned to ask very good questions. The shift manager and operator, they were involved. And, I think we all learned a lot from that situation.

MR. GROBE: May have created a nightmare with this teachable moment. It's a phrase I use, and I believe firmly. I'll just give you another Jack-ism. My view of the plant's operation is like a bus; there's engineering and maintenance, and everybody is their support operations to make sure the plant is safe. In just a week and a half or so, I haven't drawn any conclusions, but I came across two examples where it's not clear to me that operations got the best advice it could. It made a decision in one case that was not conservative, where they called the equipment inoperable and engineering came back a couple of days later and said they couldn't support that conclusion. Another case, containment vessel, they called it operable and the decision is still out on that. I don't know if they had enough information on that point to make that determination. So, I'm a little concerned. And we'll continue to be focused around this.

MR. BERGENDAHL: At this point in time, we are scrutinizing every activity. We have a lot of oversight and looking at everything we do as well.

MR. MYERS: I will tell you too, from a management standpoint, from a department standpoint, or cross-discipline and office, if you will; we will tell you now that needs improvement. Getting that engineering support is a good example; just a matter of picking up the phone and calling someone in.

MR. MENDIOLA: Going back to the plant, for a second, I would like to discuss the completeness of the tasks of the extent and the condition of the plant. Targets seem to be focused primarily on those containments in the plant not susceptible to boric acid corrosion.

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I've expressed, and you've discussed a few already, I'm interested in finding out if you had increased or could you increase your target list to include those targets which would be affected by corrosion, which would be steadily affected by operation by the material played out, if you will, on working components, moving components; that, or even electrical components. I'm talking conduits. I'm talking cable runs. All those topics. That doesn't seem to be in the targets list. And I was wondering how you were going to address that?

MR. FAST: We've made some recent, based upon feedback, from our oversight panel as well, by collecting lessons learned from D. C. Cook, we know that our issues with qualification, order operated valves, surface coatings and whatnot, and those will be revised into our plan.

MR. MENDIOLA: Into this part of the plan?

MR. FAST: Yes.

MR. GROBE: Other questions? With that, I'll turn it over to Jim Powers.

MR. POWERS: I'm Jim Powers, Director of Engineering. I'm a new member of the management team at the site. I'm going to talk about the technical compliance plan for programs. And, programs are what we use to run the site. Programs consists of procedures and instructions and people that follow them and make the programs run. Similar to when you buy a new car, you get an owners manual and there is a maintenance schedule in there. Comparable program would be that's the instructions. You have trained mechanics at the shop that, to carry out that maintenance; and the training of those mechanics. It's a complete set of activities that maintain your car. We have similar programs in the plant to maintain the plant and documentation of the plant. And what we're going to do is a systematic review of plant programs for ownership and industry standards. And, why is that important? Well, programs are what is involved in maintaining, for example, our reactor vessel for boric acid inspections containment; a number of things that are involved with the issues here today. So, we have gone through and identified 60 programs. They're largely technical programs that are dealt with in the engineering areas, technical areas of the plant, extending through how we test the equipment, how we, for example, prepare calculations and maintain them; how we maintain our circuit breakers. So, that's 60 major programs we're going to be evaluating and we're doing that now. I sit through review processes with the program owners. We ask them to come in and describe their program, describe the continuity that they've had the ownership on the program, what their qualifications are, and what improvements they've made in their program recently, what problems that they are wrestling with, where they need assistance by management to improve their program. And, we're finding out a number of interesting things. We see a spectrum of, of results in the review; everything from having the industry leader as program owner in a particular area, such as steam generators, to having someone who is relatively new to the program and needs some assistance, is getting trained up on it, getting qualified. And in those cases, we identify what's needed in terms of additional oversight or training, additional qualifications. So, it's a very good process for me and my managers to see what's going right, what's not going right and what needs to be done to improve those areas that need improvement. There is five programs out of this set of 60 that we're going to be looking at in a large amount of detail. And these are the programs that were involved in some aspects with the corrosion of the reactor vessel head. And they're listed on the slide here. The Boric Acid Corrosion Control Program, we referred to discussion on inspection of systems that contain borated water. Leakage out of the systems can cause corrosion on the components

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that are leaked on. So, we're looking at that in quite a bit of detail. Also the Inservice Inspection, because there are hand-offs and relationships between programs. The inspection program for Inservice Inspection looks at pressure vessels. It needs to be linked up tightly with Boric Acid Inspection Program, which also looks at pressure vessels. Corrective Action Program is very key to us at the site to identify our problems and effectively resolve them. So, this is one of the first ones we're going out of the shoot with, the detailed review on. That will be starting up the coming week. Operating Experience, because we need to learn from our peer nuclear power plant stations around the country, and the world for that matter, lessons learned. It's best to learn those lessons from others, incorporating them into our operating philosophy, so we don't have to learn them at the site ourselves. We want to look at that to see what its health is, and whether we're effectively incorporating them in our experience. And the last one we have on the detailed review is Modification Process, and this is a process identifying problems at the plant. We want to improve performance of our equipment of our physical plant. We go through the Modification Process and that's a very controlled process, to make sure we maintain the design basis and we achieve the results that we desire.

MR. DEAN: Jim, can you describe, I guess, the difference of the delta between how you're going to incorporate these major programs and what's incorporated in this detailed review? I have trouble with understanding this.

MR. POWERS: The initial review is what we've asked the owners to come in with a description of the program and its scope and what their, we get a sense of what their expectations are, their understanding of the expectations are, relative to the extent of their ownership, that scope. For example, do they have a responsibility for the training of the people that implement their program? And, so, it's a broad questioning process that we go through. We look at the qualifications continuities I had mentioned. We also look at how they incorporate the industry experience, what recent problems they have with their system, ongoing problems, any issues that they've got and haven't been resolved; and improvements, and when was the last time they availed themselves of self-assessment and how recent was that. So, that gives us a sense of the health. We're going through all 60, asking back level of questioning. And that gives us a pretty good sense of where we need to prioritize our attention going forward. The five programs, we're going into a much more detailed level of review, not just, not just interviewing the owner, we're setting in place teams with independent industry, consultants, assisting us on the teams to go through the program in detail out to all the areas of the plant activities that it extends to assure that it's working appropriately, and look for areas of weakness and areas of strength, and identify actions that are required to improve and upgrade the program. So, the detail will be done initially on the five, but as we see areas of weakness, as we go through the total 60, we'll be prioritizing those to be reviewed as well. So, it's not just a one time through on the 60. It's basically just telling us where is our strengths and weaknesses are.

MR. MYERS: Let me comment on that too. We looked at some other programs at other plants; and the 60 programs that we're going through, we think that that level detail is, is about where the other plants stop. We believe this latent issues program or the five we're going through, we may add some to that. We got from our Beaver Valley plant, called a late issues problem, we have the same person up here helping with that. And that's been a major contributor to, we think, improving performance of the Beaver Valley station. So, we think this is over and above what we've typically seen in this industry so far. So, we're pretty pleased with that.

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MR. JACOBSON: Jim, I've taken a look at your program document and I think there is a couple things that are not very clear to me. The portion is entitled, Plant Program Assessment, the initial reviews; who is doing the assessment; program owner that's putting this report together or program review committee?

MR. POWERS: The program owner puts the report together. We have the sections that are described, content that he needs to address, that I've talked about. He brings that in and he brings along his supervisor as well. And then the committee, having reviewed that report, walks through it and asks questions to sound out what areas, other areas of weakness are there potentially that we need to address, get a sense of what needs to be done for that program to, to improve and make a strong upgrade to it. And we also issue corrective action documents, areas where we find out that it's not meeting our expectations and we need to take actions. We come out of the meeting issuing corrective action documents to capture that area for improvement.

MR. JACOBSON: So, it's essentially the committee that's doing the assessment?

MR. POWERS: That's right. The committee does the assessment of the owner's report, and through the interview process of the owner.

MR. JACOBSON: You have things in here that you're going to be looking at, like appropriate interfaces with other programs, and clear roles and responsibilities, but I look at the top of the report and it says, include reference to procedures, guidelines and define related roles and responsibilities. I don't see any of the assessment going on here. I just wondered where it's going to happen?

MR. POWERS: Well, the assessment happens in the interview process. We can ask an individual to list out the procedures of what we want to look at is. If it says that there is an interface, another individual program needs to link up, and have a hand off, we ask how is that going, who is responsible, how much responsibility do you have once that goes into that other interfacing program; is it still your responsibility of the ownership. To carry that forward and bring it up to our attention if there is a weakness there. So, through the questioning process, we can usually find out how is the program really working, because we're going to have it laid out well in procedures, but we really have individual ownership and oversight, standards and situating process, and all of this, to make sure that it's working the way it should. We find that out pretty well by interviewing the individual, just asking him questions on how he's doing the, what he's doing.

MR. JACOBSON: One of the objectives of your, looking at your summary, executive summary; review of engineering programs and other plant programs as a result of information that would cause the reactor head damage. Contributing factors discussed, included weaknesses in program ownership, program scope, and management oversight. Yet I look at this report, attempt it again, and some of the questions there and I don't see anything about management oversight in there. How are you covering that?

MR. POWERS: Well, that's having me in the meeting, and my managers in the other part, is one aspect of it, and find out what sort of interface there has been with management with these programs. Because oversight is a major piece that there needs to be ownership, not only by the program owner, but by the management of the program. So, here are any issues that the



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program owners have and remove barriers and help make that program successful and strong. We get that as part of the questioning on it; and I think that was written down here, as one of the, one of the attributes we wanted to go through, as part of the course that was initially done. But when we do pick it up in the questioning process of it; first cut, and we get into the detail review, it's a piece that's going to be assessed. But, let me take that comment and make sure I have that as strong as we need to.

MR. JACOBSON: As a reviewer, it appears you're doing more than is reflected in your, well, just picking it up and reading it, I don't understand how you're doing some of this stuff.

MR. GROBE: On that same point, Jim, are these program review board meetings or committee meetings, are they like a certain day of the week or something like that or is this ad hoc?

MR. POWERS: No, not ad hoc. There is scheduled days. We schedule them, and based on my attendance, and the attendance or availability of the managers, there has been times we had to reschedule. So, if you had interest in attending them, you can certainly attend. We can notify you when we have them, but they are prescheduled. The attendance is expected. I'll be there; managers, engineering managers will be there; Quality Assurance Oversight is there, the program review owners, Neil Morrison and Allen McAllister are there, as well as the owner and supervisor. So, it's a consistent set of people that attend these.

GROBE: The reason I ask, there is nothing wrong with this, given the dependance you're placing on the committee to do reviews and assessments, we're going to need to be there to observe it, to observe them in action.

MR. POWERS: Okay.

MR. GROBE: So, we'll need to understand when those are occurring, give us a chance to see a couple of them.

MR. POWERS: Very well, good. I'll make sure you're notified.

MR. GROBE: Not me. These guys. You raised a question in my mind that I wanted to ask Randy. Sorry, and I'd forgotten. One of the things that concerns me, and it only concerns me because it's in question, and I don't have the answer right now. One of the important aspects of equipment inside containment is environmental qualification of the equipment. I have no idea whether this boric acid as most fear affected the environmental qualification of the equipment or not. It's a question that needs to be answered, and you know, cable jack materials, slicers, junction boxes, gaskets; how are you going about evaluating that impact? You can't do that by visual inspection per se. I don't think.

MR. POWERS: Well, our initial approach is to document those issues for corrective action process and go through and evaluate what needs to be done to demonstrate environmental qualifications have been maintained. And there will be inspections inside electrical junction boxes, for example, as we determine what the extent and conditions some of the E Q Components are, hermetically sealed from the environment. Others may have gotten some exposure to the boric acid and we would ask a question on cable, potential cable jacket degradation and there is other issues. That is on our list of --

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MR. GROBE: And the question, regarding the question itself, but the hermetic seal and whether or not it still has maintained its qualification. That was a question for you Randy and Jim answered it.

MR. MENDIOLA: Are these reviews, look at the past information; that wasn't real clear.

MR. POWERS: When you say past information?

MR. JACOBSON: When you appear to look at the program, you might look back and see how it's working in the past. It's not real clear if that's going on. I wondered what you had in mind?

MR. POWERS: The answer is yes, particularly in the detailed reviews, we'll be looking at how the program evolved, and what particular issues there may have been with the program over the past. Corrective action documents are signed in the program; other industry operating experiences that may have been pointed out, we say that our program may have been susceptible to. That's a major piece. And you find out in the interview process for the initial reviews, that typically comes up. Where is the area of problems? Has it been an issue with the interface to other programs? That usually comes out that they would, hasn't worked as well as they would like, hasn't done it for a long time. Made it work, we forced it to work, but it's not, has not worked as well as it should or perhaps it's not working specifically as we have written down, or maybe we don't have it written down. And there is, the individuals are working from their own knowledge, and we've got somebody with a long team experience at the plant to program. And if they were to leave, that little cog would be taken out of the machine and no longer works. So, our program is not complete. So, we're looking for those types of areas over the longer term too.

MR. JACOBSON: One other question, you've listed a group of the first ten programs that you're going to review; and you've ranked them by lists; high, medium and low. These ten, are these all high or is this a mixture or are there more high in this? What are these?

MR. POWERS: Well, the first set of programs are important to us. I would say, I'm not sure that risk is the right term to be assigned to them, but they're important to the function of the plant. The five that I described or mentioned earlier on that had some aspect of involvement in the reactor vessel head issue. Certainly, we want to look at those specifically, and they include some of the keystone programs. We need to look at early corrective action, because we're using corrective action, have used it, continued to use it. Key Stone Program. It's to solve problems, Modification process. We also did a, an initial what I call a model program review on our problem list, in particular, safety assessment, PSA program to determine itself; develop the report out on it, so we had a template to go from in terms of establishing what the standard was for these reviews. So, that was a very another significant one, because these days that's how we're managing the plant with a lot of input from our PSA models. So, there is a level of importance. I guess I could say potential risk to operation of the program is how we looked at those.

MR. JACOBSON: It's not specifically then, as you said here, specifically characterizing risk programs, there is sensitivity ranking the programs. It's not, it's not really done by risk then?

MR. POWERS: Not by a PSA type of risk, but I guess risk to the importance of the function of the site.

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MR. JACOBSON: And these ten then, are they all in the high ranking? You have high, medium and low. Can you tell me that?

MR. POWERS: I can't tell you that right at the moment, but I expect they're in the high range and I have to look at the details and get back to you on that.

MR. JACOBSON: Okay, thanks.

MR. GROBE: Jim, you had mentioned that, used of the word consultants. A lot of this, effectiveness of these evaluations, the way you're doing them, depends on the team, the review panel. And, that's a strength, I think. But in the, what access are you going to make of yourselves, what access are you going to take to industry experts? Other plants might have best practices in certain areas, tapping into that expertise to assist you in these evaluations?

MR. POWERS: Well, there is a couple of approaches we're using for that. One of the things we do talk about with the program is what bench marking have they done. What is the best and have they gone to see what that is. We need to see the best to understand. That's a piece of the review. But what we're doing for obtaining a consistent best, we're obtaining consistent expectations in review and we're retaining outside help, self-help. We sent the first couple of individuals that we brought in through the PSA model review. So, they've gone through that. We're working out what the expectations are, making sure we understand what the level that we want them to go to detail is understood. And there is two of those individuals and we're breaking them out into parallel training as we go through corrective action process and boric acid patrol process, so they'll carry forward on continuity, here's what that expectation is, and have that in place as we bring on several more individuals to beef up our teams and assist us.

MR. GROBE: These are people from outside your organization?

MR. POWERS: That's correct. These are people outside the industry, consultants and assistants.

MR. GROBE: That have specific expertise in boric acid or corrective action or expertise in assessing?

MR. POWERS: Yes, in some cases, or they have the rounded depth of background that they know where to probe for problems. Many consultants there worked with corrective action. At many sites they've seen good and they've seen bad. They bring that experience to the table.

MR. HOLMBERG: The question on the scope of your programs that you initially selected, the one area that I didn't see in there, I don't know if it was considered, is the role of the Quality Assurance Organization and their role in audits and so forth. And, obviously, they have some, some part to play in terms of whether or not they need to learn a lesson, if you will, or have some opportunities coming out of the original head degradation issue. So, I want to know if you could speak with respect to those organization?

MR. POWERS: Certainly the role of quality assurance is to provide oversight and point out areas in the organization where we are weak or need areas of improvement; and they, they are participating in these program reviews in the oversight function. I think going through that process in itself is raising the standard in terms of what the expectations are; getting a lot of

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very probing issues from them, a lot of corrective actions is being generated. So, I think that the process itself is providing improvements in that area, in the quality assurance area.

MR. ESHELMAN: I would like to add to that. In my program, Management Human Performance, that's a specific line item to look at the quality and oversight organizations; how the, how the effect was; what we need to do to improve it. We have a new Vice President of Oversight. He's chartered to commission a team to look at the oversight organization, the role they play in this issue. It is not in the program, it's in my area.

MR. MYERS: And the other thing, we created a vast presence of oversight now. You've asked for oversight. Additionally, if you look at our Oversight Review Board, once again, if you look at the last time, we're sponsoring an independent self-assessment on the interactions of the oversight groups toward this whole issue. We'll be doing an assessment of quality and assessment of our CRB, how it all -- why don't we pick it up there; that's the independent assessment we're sponsoring. Looking at bringing in an industry expert on that too, so I know who that is already. Does that answer your question?

MR. HOLMBERG: Yes. I guess I was, what I heard in your discussion was basically you're anticipating you're going to learn from the ongoing effort and then you've got some other efforts in your management and self-assessment areas that you're going to pick up key roles in that. That's what I just heard, I believe.

MR. MYERS: Exactly. How did our oversight roles not pick up this issue also. I mean, that's the question, and we need to assess that.

MR. HOLMBERG: Right.

MR. MYERS: Okay.

MR. POWERS: Okay, that describes what we're doing for our program reviews. Any other questions on that?

MR. MENDIOLA: I had a question. Primarily has to do with the summary, if you will, at the Davis-Besse Return to Service Plan, discussing specifically this area. There is a lot of reliance on the entire table of when the items are going to get done and by who, relating to plant restart. Excuse me for reading, but basically says, prior to restart detailed review, five programs will be performed following plant restart, complete reviews of the remaining programs are on the list. As I understand from what you just indicated, I will indicate 55 programs which were formed following plant restart, but further down in the discussion it talks about previous start review can be done for the five programs, only on portions of those five programs. The important portions it talks about. And that those would be implemented prior to restart and then additional reviews would be done as you mentioned based on ability -- I mean, I'm sorry, risk on plant liability and safety. I'm a little confused over when actually all these programs will get done, if you're indicating it to plant restart.

MR. POWERS: The schedules we have for the reviews are in the plan. I know you're citing there from the restart readiness plan. In the specific plan we show timelines and program reviews. They'll be done in August, the August time frame. So, it tends to go in detail.

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MR. MENDIOLA: The 5 or 60?

MR. POWERS: The 5. The 60 will be continuing on. We will look through all of those 60, intend to review all 60 programs for the additional review prior to restart, but as part of the process of doing that review will give us prioritization on areas where we want to go for detailed review and how we schedule that. What is detailed priority? Some of those areas we find a weakness. We want to do a dry restart, that could be the case. That's what we're looking for as we go through our programs.

MR. MENDIOLA: Then that statement, then based on need, and it could, the program could be elevated up the list, if you will, to a higher priority.

MR. POWERS: Yep, yep.

MR. MENDIOLA: But the core five then, the first five, as I understand it, will all be done prior to being prepared for restart?

MR. POWERS: That's right.

MR. MYERS: Should we find something else broke, don't look good, we'll deal with it.

MR. MENDIOLA: I understand.

MR. GROBE: Any other questions? Lew, we've been at it for an hour 45 minutes. I'm looking at the rest of the slides. I'm wondering, I think we've had a chance to look at the system. Now the plans. I would like to talk about that one and I would like to talk about Management and Human Performance. I'm not sure we've all had on this side of the table an opportunity to review in detail Restart and Post-Restart Plan and Restart Action Plan. Should we defer those to a later meeting?

MR. MYERS: That was my thoughts.

MR. GROBE: Okay, let's go on then with the System Health Assurance Plan and then get into Human Performance and maybe call it a day.

MR. POWERS: Also with respect to System Health Assurance Plan. This consists of a three-phase approach that we're adopting for the systems. And, the first phase is complete, and that was an operational readiness review of safety and reliability systems. This was done over the past about a month, month and a half. Randy Fast led this up. This was again similar to the program review. This was an initial review of system health, asking the responsible system engineers to come in and talk about their system, looking at what improvements had been made, what problems do they have for their system, what modifications that they are striving to get done on their systems, and perhaps having problems getting prioritized and completed; what corrective actions have had problems with their systems, and get a general sense of how the system health and system engineering and provide an opportunity for them to speak to management about what they want to get done to improve their systems. And Randy served as the leader and champion of that for the NRC. And the Phase II is a comprehensive review of 30 systems.

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MR. MYERS: Can we stop right there? Again, our Phase I, Randy led. That phase right there was all directly after -- so they stopped there, did those two phases over and above what we've seen elsewhere. So, once again, it shows how comprehensive our plan is. Isn't that correct, Randy?

MR. FAST: Yes, sir.

MR. MYERS: Go ahead.

MR. POWERS: And I'll talk about it in more detail on the following slides on these, just briefly the definitions. Phase II is a comprehensive review of 30 systems that are based on risk and performance that comes from our PSA risk models. These are 30 models that are risk significant to the plant. A comprehensive review is just that, outlining some details in the following slides. Phase III is what we call Latent Issues Review. And we selected three items to do a Latent Issues Review. And this is something that we started at our Beaver Valley Plant and follows through and is done in our Perry plant. It involves a team working on a system for six weeks, sometimes up to eight weeks, studying all the details in a system from the past. They look at maintenance work orders, which are the record of work done on a system. They look at corrective action. They look at industry experience on a system. They look at design basis of a system. It goes into a lot of detail, and particularly this is where we link up into the design basis maintenance and its application, use and surveillance of the plant, the surveillance of structures to be sure that the total picture is sound. The three systems we selected for that level of review are the reactor coolant system, because that is central to our core issue today; emergency diesel generator, because they are our emergency power supply, very important to the plant safety; as is the auxiliary feedwater system, which provides cooling to the reactor system during the plant upset. And, these are areas that we feel are important to go into the very high level of detail. And there will be teams again led by industry specialists, consultants, to supplement our staff and provide outside perspective to these reviews to staff these, be sure that they get done promptly. And they're gearing up to start now, and again in the next several weeks. The next slide shows the result of the initial Phase I, the Operational Readiness Review. The results is System Engineer came to Randy and said, you know, I've been trying to get this pump replaced and it's been installed in the budgeting process for several years now, and it's still there to be done. And we took action on that. John Messina here is the Chairman of what we call Project Review Committee, which manages the funds for the site, the site budget. We bought these projects as resulted from the System Readiness Review and Project Review Committee and authorized funding. We're doing work now on the plant. This is a typical example of the type of work that does get done to improve the system of the plant; new pump, refurbished pump, valves, motors, things that need to get done, and we're pushing those through now. There is a lot of activity and there's going to be a lot of activity for engineering, as you can imagine, for a lot of the modifications that are on too. Now they've been authorized to get it done. This is another set of plans to do that. We're arranging that support. Phase II then, going on to slide 24. Comprehensive Review is looking backwards to see how the system has been doing in the past. And we're looking back 7 to 12 years. In the case of condition reports, we're looking back to 1995 time frame. In the case of modifications, we're looking back to 1990 time frame. And these we feel are significant milestone flags when there may have been changes to the site management occurring that could have softened some changes in practice at the site that led to potential issues development. Modifications in particular; we looked at the modification that had been proposed to the service structure and for access to inspect the reactor head. And that modification was, was deliberated on in terms of how

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necessary was it. There wasn't an understanding about the issue with the boron corrosion mechanism at that time. So, modification was not done properly. Now it has been done. But we're looking back at all the modifications; the ones that have been done and ones that haven't been done to see if the right things have been done for the systems. Same thing with condition reports. Did we get to the heart of the problem and solve it or did it recur. Did we carry out with corrective actions as written. So, it's a comprehensive review looking at those areas. Includes system walkdowns to physically go look at the system, make sure there is no surprises to the review of the documentation not uncovered.

MR. JACOBSON: What's the scheduled times then for these various phases?

MR. POWERS: The comprehensive reviews will be done prior to the restart, and detailed reviews will be done also. The comprehensive reviews will be headed up by the individual system mentioned here. It's one system we know the most about it. They'll be supplemented by outside specialist consultant assistants to get it done. We're also arranging groups like corrective action team, qualified level group that can help go through the corrective actions associated with the systems and make sure there is a common high standard of review of corrective action history on it. So, that's all the prior to restart activities. Once again, comprehensive review indicates significant problems with the system that's not currently scheduled for the Latent Issues Review, go into Latent Issues Review on that too. So, here's an opportunity to dipstick the health of a system and proceed from there if we find areas requiring further review, but this gets an idea of the Latent Issues Review scope. Compliance with design basis documents, identifying the design functional requirements, confirm required functions are met, provide action as persist in document improvements. One of the areas that we've been working with over the years at these nuclear plants as they were designed and constructed in the 70's, early 80's, a contractor engineering organization prepared the calculation and analyses of support that designed the plant. Then they turn it over to us to run the plant. As we move forward with time, we find areas that need improvement, modifications are made, reanalysis is done, design basis of the plant has changed. Important industry initiative to make sure the design basis is maintained and is updated and maintained strong. So, this latent issue really goes after that. So, if we have a calculation that says a pump should provide so much flow, we go to our test instructions and make sure they also test the pump to derive that much flow and the process is linked well together to demonstrate the system performance. The results of the latent issues review will be independently reviewed. As with many of these products, not only are they prepared by outside consultant support, independent brought in that way, but then we have an separate engineering board that's been assembled. It's going to be reviewing these engineering products and critiquing them prospectively, to be assured that they've answered all the questions that would be outstanding on a system, and the quality of review is consistent with what we expect or require. And these will be completed prior to restart, the three systems I have listed there. Is there any questions on that?

MS. COLLINS: I have a couple of questions that you didn't answer in your presentation. The first is, it looks like each of these phases will generate perhaps restart issues. I was going to ask about the results of your Phase I and you presented that. Is that your only restart issue out of your Phase I review, that high pressure injection pump replacement; or do I not understand that?

MR. MYERS: Go to page 35 of your handout. Why don't you flip through. That was part of our presentation.

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MR. BERGENDAHL: What happens in these plans, we generate work orders, condition reports, modifications. When you review the plan, the system in this case, identify actions to be taken. Write the conditional report. That conditional report gets reviewed, and it will be performed prior to restart, unless the review board determines that it does not meet any criterion and can be done safely at a later date.

MS. COLLINS: So, the results of Phase I would there be other condition reports that have been generated that are prior to restart in addition to the pump replacement project that you just discussed here?

MR. BERGENDAHL: And the pump replacement project is something we had done in the outage. There was motor replacements and modifications that were identified as things that came out of that initial review that we decided to do prior to restart. All of the outputs are adapted by the board that determines whether or not it will be done prior to restart.

MS. COLLINS: So, that was probably the most major item out of Phase I, the System Health Assurance?

MR. FAST: Your work orders, some training was identified, some procedure changes.

MR. POWERS: Also another significant modification is, for example, our start systems for emergency diesel generators. We had an ongoing rust concern with the original one. And we've got some significant projects that were approved to change out those systems and put stainless steel pipe fitting and dryers to improve them. Now those are scheduled to be done, I think the first set is scheduled for November. So, it's not specifically tied to startup, but it is something that's, that is scheduled to get done; a significant project scheduled to get done.

MS. COLLINS: A couple of other questions. You say it includes system walkdowns and this is just a follow-up on Scott's comment. That was not real clear in the plan that system walkdowns were to be a large part of this health assurance and kind of what other walking around system is very general.

MR. POWERS: Well, they're looking for overall system health. You can look for leaks, any sort of degradation of gaskets, components, some of the nonmetallic type of components in it, any maintenance work that hasn't been completed, missing bolts. It's a thorough walkdown. One of the things we're doing, we identified this ourselves, is as we get to this point, we need to provide more specific instruction on exactly what are we looking for and we want to get some of the individuals that have been involved previously, for example, at the Cook Plant or the Salem Plant, here to show us what they learned in their system walkdown. So, as we go out for the first set, we do it right the first time. And we'll be documenting on a walkdown procedure with the attributes that need to be checked off.

MR. THOMAS: Jim, comprehensive review states that walkdown will be done where appropriate. Will you clarify where appropriate is?

MR. POWERS: I think it's going to be appropriate in every case where the engineer gets out and walks down the system.



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MR. THOMAS: One other thing. Sorry to interrupt, Laura.

MS. COLLINS: Go ahead.

MR. THOMAS: Technical compliance report tends to review the boric acid review program. What's been done to date to raise the sensitivity of engineering staff will be performing the system help evaluations to the proper implementation of that program?

MR. POWERS: The Boric Acid program, we have revised the Boric Acid Program to incorporate improvements that have been identified from industry lessons learned earlier this year, and went through that process. And so, we incorporated those improvements into the inspection of structures that the engineers have been using. So, those improvements are already, already incorporated and now formalized in the program document itself, and we will be continuing to improve that.

MR. THOMAS: You improved the program and engineers will receive training on those improvements; is that correct?

MR. POWERS: Right. That was in the inspection procedures, so the engineers were trained to do their inspections.

MR. MYERS: Our process is maybe improved. First thing you do is a leads analysis; systematic approach to training. And as you do that, you train your people to new programs. So, that's part of our process.

MR. THOMAS: Okay.

MS. COLLINS: One last question on this plan. I know in the plan that I reviewed said that the reactor coolant system was going to get the latent issue review and yet your slide has two additional systems on feedwater and emergency generators. Is that as a result of your Phase I and II reviews, adding systems to the Phase III?

MR. POWERS: No, on our part we felt that that was an appropriate ovulation of significant systems to look at. And that's based on existing assessments that we've done internally, that we found some areas that we need to look at in more detail, and we're going to look at our feedwater system in more detail. We started out with reactor coolant system because of the work and walkdowns being done in detail there. We want to make sure the overall health of it was very sound. And then the case of the emergency diesel generator, we selected that, because it's important to power supply to the plant. That's additional scope we felt was important to add. As we go through this, we're going to be looking at collective significance of issues that we find. And, if we do one system, that it's difficult to say, if you find an area of maybe a calculation, type of calculation is not rigorous enough, how broad spread is that. But if we were to do three systems, that gives us a better data point to draw a curve, if you will, what is it. Do we have a similar problem in each of the three systems. So, we selected three of our very important systems to do this, a broader picture of what the health is.

MR. FAST: Laura, I might clarify. As we did the Phase I, I had talked with Joe Rogers, our Plant Engineer Manager, about the Latent Issues Program, and we had a senior engineer from Beaver Valley come to the site to talk about that program. Early, we committed that the reactor

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coolant system based on this issue with the reactor head, that that would be appropriate, but we knew we would want to go review and potentially expand that population.

MS. COLLINS: Okay, thank you.

MR. HOLMBERG: As your plans are developing and you find documentation in your directive issue, you go through the beginning screening process to determine which restart or post-restart, have you developed a standardized set of categories that you call restart? Other plants have done this, where you've got various opinions that, you know, are going to be things that you want to fix for restart and things that are post-restart work. Maybe not got that far?

MR. BERGENDAHL: Yes, our restart action has a list of the significant criteria to be used.

MR. GROBE: We're at the very earliest stages of developing confidence in what you're doing; and part of that confidence at this point is based on what we read. And, there is a couple of areas where we've heard things today that are different than what we've read in the documents; for example, system walkdowns where appropriate. Well, it's appropriate all the time. We need to have another example as the three systems, which are three excellent systems to be doing your Latent Issues Review on, contrasted with the one. My expectation is we're going to ask you a lot of questions as we have today, and continue as we go through these, such that we develop confidence in the plans that you have. And that's the first step. Of course, you'll be implementing these plans. We'll be inspecting implementation. We'll be looking at the outcome and we'll march forward. I'm wondering if you had plans to update the documents that you've given us to address what you really expect to have happen. And that way we can have confidence in what you have written and, quite frankly, hold you accountable to it.

MR. POWERS: Absolutely, and they're tenant documents and we want to get them to you, Jack, to support your O350 processing; so you knew what we were doing and expect us to do.

MR. BERGENDAHL: Let me clarify that. We developed plans, went through our internal review process. We've since had them reviewed by our restart overview board panel. We've gotten some comments from them. Also, as we move from the planning into the discovery phase on several of these plans, we learn some things from our inspections and reviews that fed back into the plan and additional areas that needed to be looked at. So, we will revise these plans as we get that feedback from the independent verification that we're getting and also from our discovery phase. We'll make copies and issue a revision to you as soon as its approved. We'll keep in close communication.

MR. GROBE: Another area of difference that I've heard today discussed several times; in the system reviews, the plan talks very clearly about the system engineers doing that work; and program reviews, program owner doing the work. And you've mentioned on a couple of occasions that you're going to have outside assistance in certain areas. I'm not suggesting that that's required. It's your plan. But given the experience with the head degradation, there may be some questions regarding the standards of some of the staff. And you may want to develop assurances that you do have the right standards. And a good way to do that is to get some outside looks in some areas. So, if that was reflected in the plan, then we would have a higher level of confidence that all the right pieces are in there.

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MR. POWERS: Well, thank you. Those are the plans and I would reflect that in detail in the plan.

MR. BERGENDAHL: The restart action plan building block covers all the other building blocks and it shows that each phase that we go through has external independent oversight right from the origination of the plan to the closure of the action item. So, we are utilizing the Davis-Besse expertise, but we're also providing independent oversight through every phase.

MR. GROBE: We're coming back to the slides that I suggested that we not talk about several times. Maybe we should have been talking about them, but we'll catch them at another meeting. Those are good points. Any other question on system health? Okay. Can we go on to management and performance area?

MR. ESHELMAN: I can do that. I'm David Eshelman, Director of Support Services and I'm author of Management Services Assessment Plan. Our charter was to conduct a thorough assessment, management and organizational issues, and create a comprehensive leadership organizational development plan. As you heard from Randy and Jim, we're looking at structure, systems, components and programs. Each of those however shares a common element, and that's the human element. Humans operate equipment. Humans maintain equipment. Humans write programs and processes. Humans implement the processes. So, we need to look further than just the programs and processes to find out the real issues behind this. We have a lot of good people at the site. All our people are good. They're very highly qualified. Highly trained. They come to work to do a good job. So, when you have something like this, you just can't look at individual human performance, you have to go a lot deeper. Just recently I took the opportunity to do a containment tour, including going underneath the reactor vessel. As I walked around, I saw the conditions, the components, the structures, the systems, but what I realize more importantly was the product of our people. The equipment, the processes are a product of our people, and our people are the product of the organization and management. So, we need to go back to the organizational management to really delve into this issue. Since this is a cross-cutting issue, every program that we've talked about so far, every building block is related to issue and performance, and every building block most likely feeds into human performance plan. So, this is going to be a living document with a lot of input into it. Through the actions of this team, our management organization is committed to maintain a strong safety culture to ensure our Davis-Besse team has a proper focus and tools for success. We're already on the next slide. This plan represents the actions that must be addressed to enhance our employee and public confidence, as well as yours. This plan is sponsored by the Chief Operating Officer who wanted direct involvement with the plan. That's Lew. He wanted to be directly involved. He is the ultimate oversight and approval authority for this plan, as well as the others. That brings up a key point. His presence represents a significant change to our organization. Bob Saunders, the President of FENOC has augmented his corporate staff with the addition of Lew, the Chief Operating Officer, and Lew is devoting full time to Davis-Besse to provide oversight and direction until restart. So he's spending his time at Davis-Besse, as well as the new Chief Operating Officer. We believe, wanted a new vice president of oversight. We created that position for the individual to overlook activities, internal and oversight activities to put more focus on that. We also created an executive position; Executive Vice President for Engineering. As we mentioned previously, this individual was an important senior executive and we just got him this week. Besides the corporate changes, there have been other management changes at the site. Activities completed to-date. First of all, we made some changes to strengthen the organization, internal D-B and also within

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FENOC. The initial roots and cause analysis report, the one that's on your web page, we had a discussion in Washington on that. We used external personnel for that. We used regional administrators from the Nuclear Regulatory Commission. We used the power outage to start looking at these human factors. And as you saw on that plan, there was some identification of management and organizational issues. Your Augmented Inspection Team. The report from the Augmented Inspection Team identified and characterized the management in the organizational areas. We've had plenty of internal and external reviews of this condition. We've used executives from other facilities recently to come around and interview people and provide us some feedback relative to where we are and what we need to do. Currently in progress, we have the FENOC Quality Assurance Review. The new Vice President of Oversight commissioned a team to look at five condition reports that were identified in the original cause as being characterized as missed opportunities. These were ones where we could have done better to identify the problem. This individual is looking at not only the corrective action process, but how it was implemented and what barriers there were and how that broke down. So, that's a very important review to understand that corrective action process and those specific condition reports. There is personnel feedback. I personally have the opportunity and privilege to go over the root cause timeline and event with all the supervisors. We held approximately four sessions, three complete so far. And what I covered, there is two reasons here why I want to cover the whole timeline. It is very important because this event does not point to a single individual; doesn't point to a single department, organization or team. Essentially it goes over at least a ten-year period. And going through that timeline, it opens our eyes up to the opportunities that we had, the opportunities that we missed, as well as some of the barriers that we could have had in place and didn't. And, the first part is to get the realization to the supervisor or team where we are and how we got there. That's very important to internalize or more for me as a building block. I get feedback from the employees; feedback from the supervisors. And the best way to know about the organization and management is to ask our people. So, I have been getting plenty of feedback during these presentations. The last item going on right now is our formal root cause of the management organizational issues. Lew commissioned an event, and it's to delve deeper than the original cause report and perform detailed root cause of analysis of the nontechnical issues. We're using experts from the industry, human performance experts. We have an expert in root cause of management issues, using a very good system that that person is involved with. This team is getting information from all the other teams, and through their efforts that would be the product that would help us go forward and develop our plans. So, as I mentioned, this plan will have input from the building blocks, a lot of the other activities so far and even some of the ongoing assessment activities. Next slide. To sum it all up, in conclusion and as stated in our Augmented Inspection Team Report. "Management ineffectively implemented processes, and thus failed to detect and address plant problems as opportunities arose." The problems we're talking about is what were identified as missed opportunities we review on the condition reports. Next slide, please. From all the information available, what we have so far is four key focus areas identified. They're the four common contributors coming out of various reviews that we feel need to be addressed. They are ownership, oversight, standards and decision-making. I believe you've heard these items talked about, most of them so far. Ownership, we're looking at program ownership. What it means to be an owner. What your responsibilities are. The people that implement the program, what their responsibilities are. To be successful, we have to be sure that our employees understand what ownership means; and more importantly, to support them, to give them the support they need to be stewards of the program. Oversight. That's a management monitoring of activities. Our effectiveness, not just time, but quality time. I get a lot of feedback from my supervisors about that, relative to they would like more time with

this. We need to be more effective when we're out in the field. Also that's being looked at from the higher organization as far as oversight roles. Outside of the company, we have company nuclear review board oversight. We have internal quality assurance oversight. We're looking at their roles also and that's what our new Vice President of Oversight is tasked with. Standards, that's very important. Two activities relate to standards. Expectations are what we communicate. Standards is what we accept. You have to make sure our standards are consistent with your expectations. We have to make sure our expectations and standards are industry best. So, it's up to us, this team up here, to enforce standards. Our people will do what we ask of them. We have to ask them to do the right thing. The other issue of standards is standards of industry excellence. As we described, there are opportunities where as industry moved ahead, had constant improvement, we stayed with some of our programs, processes. So, we're going to get on the process of researching the industry, finding those good opportunities and essentially being on the constant improvement treadmill. Decision-making, that's the final one. That was real important as you go through the timeline. You can see where decisions were made, different organizations made decisions, how we got here. So, how we look at things, how we ask questions, how we even characterize our questions are very important. Perfect example is, we were talking avoidability for quite a bit. We used to have the engineers provide operability justification. That's a good word, rather benign; however, from the engineer, when he heard operability justification, what he hears is, I want you to justify operability, i.e. with the input being operability. We've already changed that culture. We're changing that name. We're making it operability determination. We want the engineer to determine if this equipment is operable or not, and we even reward them when they say, I can not justify operability. That to me is a strong, strong character when you come back like that. We need to reward those good behaviors. So, decisions as far as why the service structure modification is deferred has a very interesting story behind that. We need to look at how we go forward. Our daily meetings, we challenge each other. We're more open. We're not afraid to challenge. We ask harder questions; making sure we understand the issues and more importantly, making certain we provide the support for our people to be successful. Through this program's actions, we'll reassure our safety focus and verify we have organizational tools needed for success. Questions?

MR. DEAN: That was a mouthful. You know, much like a baseball team or hockey team that's going bad or having problems and they eventually get rid of the manager; you all come in and you change a number of managers and made some alignment at management level. What it comes down to is, is really imbedding the standards all the way through the staff. Looking at the restart plan and some other things, I see a lot going on relative to managerial issues. What I'm interested in hearing is how do you plan on, on assuring that you have embedded our expectation and standards? How are you going to measure that in terms of ensuring that, that the message that you want to convey is understood and acted upon consistently?

MR. MYERS: I think as we go through this process, we move back on the chart on page 25. We build in oversight review groups. Our engineering, here, all our engineering products go through engineering assessment. And as we look at these products, we look for those standards. So, we've got trained people under standards; establish new standards, and continue to look at those standards as we go through the building block of discovery on the other programs; restart station, the review board. Once again, all those things go through there and we'll continue to look through those standards. And finally, over at the very end, we have restart. We have Restart Oversight Panel. We created that, a group of industry experts, that we're using to continuously bring the programs in and present the programs as we go through

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this and provide feedback to us. This is not a one-time shot process. This is going, this is going to take us not only at startup, it's going to take us after startup, too. And we have to get them back to the highest industry standards. It's going to take time to do that.

MR. MENDIOLA: I don't think I understood. How are you going to, if you will, institutionalize this for long-term gain?

MR. POWERS: One of the areas we plan, is the engineering drives a lot of engineering programs and where all the plan is, Engineering Assessment Board is a piece of the oversight that Lew described. The Engineering Assessment Board looks at, it's going to look at the output of all these building blocks, technical perspectives. It's also going to look at modification. It's going to look at products, calculations and corrective action. The way we're going to use to ingrain this for the future, for the long term, is starting up this board initially, core deposit of outside supervisors to solve our expertise product, instead of just planning, demonstrate question-asking characteristics. And they're going to get this board up, and get it moving. And it's supplemented by staff from the floor. So, if you're reviewing, let's say reviewing a electrical topic, we have an independent electrical engineer on board on that review. As we move forward, we'll be mentoring the staff as I, as they sit on the board, to be critical thinkers, to ask critical questions, to ingrain that into the practices as part of the process, which are not on the engineering documents. This is something we've done at the other stations; Perry Station, for example. Really given some benefit. As we go through the restart, then we'll be releasing the contractors, once we've achieved our objectives and got performance of the board and questioning attitude well established. And the individuals there will have been mentors, there will be an onus for the Engineering Assessment Board who continues forward as the chairman. And, that, I think, is a very effective way to assure that the, that questioning attitude is in the culture ingrained. If we were to rely solely on boards, they come and they go. We want something that's going to last. So, this is the concept that I have developed as part of the new process in the engineering area.

MR. ESHELMAN: From a bigger picture, this is an area where we need to lead. Leaderships need to be out front. We need to lead by example. That means bringing in expertise, looking out in the industry, identifying these high standards, bringing them back, communicating it to our people. And through communication, then next, then we do follow-up. We need to be out observing our people. Making sure that they understand our communications and therefore fulfilling what we expect of them. And then the coaching process. So, this is truly a leadership message. Our daily meetings is the start of it. That's when management team gets together. We set the standards for people; not just for program performance, procedures; it's our standards of behavior comes from the management team.

MR. MENDIOLA: I hear what you're saying. I don't mean to interrupt what you were saying before, but I'm curious to make sure you are not following, if you will, a timetable, and that we reach this amount of time, we restart it, we're done, you contractors can go. What I'm after is to be sure that the long term run, that you've reached the point where you are, what's happening on-site is satisfactory to you, but at the same time not satisfactory to you and that you're seeking to reach a higher level of excellence.

MR. MYERS: Once you get the maintenance program, who uses the other plan is management program and corrective program. We've been on corrective actions all our -- for example, you ask the question, how could the operators be doing containment walking past the

time switching and causing the rust, and not identify that. We expect our management program to pick that up early. And the Corrective Action Program has found this problem, so it will go long, long after startup. You know, it's not something we can just hit one time and walk away. We've got to thoroughly understand it and change with the ages.

MR. GROBE: I just really appreciate Bill and Tony's questions, because I have several questions of the same ilk. On slide 30, could you see last bullet there; "Management Root Cause - Discovery". I think you have an ongoing kind of a global effort that is looking at all the data you collected. So, I've been hesitant to engage in this issue yet, because you're still looking at it, and I would like to look at what you completed. On page 31, slide 31, you conclude that "Management ineffectively implemented processes". There is no doubt that the management is accountable to the organization, if people implement processes. And I was glad to hear the words you used, Dave, was managers need. If you go to slide 32. Dave, you put oversight in the context of the new Vice President of Oversight. Talked about ownership and standards and decision-making. I put these ownership standards and decision-making as the guy in the field with a wrench. Oversight is the first-line supervisor. And, you know, it's the same question I think Bill and Tony are asking. How, haven't seen the details of how you're going to get first-line supervisor, the workers in the field aligned with your expectations and your standards, because they're the ones that implement the programs. It's not the managers that implement the programs. And how you're going to measure that? How you're going to assess where you're at, where you have problems, where you need to fix things, and how you're going to measure how you're making progress? It's very difficult questions. I appreciate that, but they're very important.

MR. MYERS: You know, I think, do you have time?

MR. FAST: I was just going to say our supervisors model the performance of our leaders, our managers. And if our managers are not in the field helping to resolve issues and understand those issues, that's the supervisor's model. That's why when we go back to that lead by example, it's our direct involvement in the field, walking and talking and understanding, helping to set the standards, that models behavior for our supervisors. That ultimately becomes the model of success for high performing organizations.

MR. GROBE: I agree with you that you need to set the expectations and model those expectations, and there is a number of different authors that have written all sort of books on organizational effectiveness, but I think the nirvana of organizational effectiveness is that none of you show up at work one day and everything happens the same as it would have happened if you weren't there. And I'm not, I haven't yet seen the plan on how you're going to get there and how you're going to measure progress.

MR. BERGENDAHL: We don't have it.

MR. GROBE: I know. I'm very interested. And we're talking about hardware. Hardware is essential to assess and fix. I don't mean to diminish the amount of effort you're putting into it. It takes a lot of effort. But it's not easy. This is the hard part. I'm keenly interested in seeing that root cause and how you're going to fix this and how you're going to measure progress.

MR. BERGENDAHL: I will answer the question that you and Tony asked, but the starting point indicated that series of sessions where Dave and I are meeting with every supervisor on site.

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We go through the timeline, and exactly how we made decisions, how we provided oversight and identify where we did not meet expectations and what the expectations are. Spent several hours with every supervisor on-site establishing that baseline. Followed up then with the senior managers here. Will meet in small groups of employees until we've met with everyone on-site and do the exact same thing. Make sure we get a common starting point of understanding the difference between where we have been and where we need to be. So, we'll set that standard and then our management oversight in monitoring will ensure that it's being reinforced by the first-line supervisor.

MR. MYERS: Again, once we finish, our management will sit down and lay out specific actions over the long term that we're going to check. We're going to change and take, change behaviors and monitor the effectiveness of that. So, it's not only, maybe training programs, maybe it's monitoring programs. You know, once we finish that, we'll decide on those things and we'll use that for the long term. We'll monitor the performance. That's what we're doing.

MR. MENDIOLA: Like a lot of groups, a lot of licenses like yourself have sat across from groups like us, and had these very same conversations and said these very same things a number of times; and to various degrees it's been a lot of successes and there has been a lot of not very good successes. I can just say after some experience in this matter, I mean, you've said all the right words and made all the right slides; now it comes time to go out and do what you say you plan on doing. And, my issue is quite simply, is that you have to do it, you know, immediately. You have to do it yesterday. Have to do it today. Have to do it tomorrow. And since you've set this new organization up, the different phases obviously on your side of the table, there has been some opportunities, if you will, to take on these four focus areas. And I think you need to be sure that you are doing everything you can, if you will, this new way and get away from the old way; and make sure that your organization, your people, your procedures and all these plans that you've made are being implemented on the site. We've had a few discussions with, and a few technical issues have come up in the last few days and we would like to think that your organization is working, if you will, under the new way, and approaching designs. We have some questions in our mind outside looking in that that's happened. And we'll obviously be following up.

MR. MYERS: It was a sobering experience. It was a new way to look at it. Instead of sitting back and waiting for the situation to control us, we have taken a more proactive approach. And we're trying to do that after that morning meeting. And that was too late. We should have, it should have been that night. That I understand.

MR. MENDIOLA: Everybody has a role and responsibility in this and everyone has to do it.

MR. MYERS: I understand.

MR. GROBE: Any other questions or comments in this area?

MR. DEAN: The only question I have is, do you have a sense when your collective assessment on the detailed root cause that you'll be prepared to talk with us on that?

MR. MYERS: Sometime after the end of this month, I plan on wrapping that up at the end of the month sometime, it looks like, as a team. One thing, I'm sponsoring the team and I'm not pushing the admission of the group, but what we've done on the root cause is we have the



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team players that are performing the root cause. All our experience is root cause people. We're also bringing in industry expertise from time to time. I've got that lined up a couple different days from some peer performance groups from other utilities. And then we're bringing in also an outside consultant, various phases, to look at, challenge our root causes, who we find. So, this is not an easy issue. And we're going to take it on in a very serious manner. Hope to be through with that sometime the end of this month. Maybe next month we should be ready to present it to you.

MR. GROBE: Lew, the meeting that you had Monday, I can't remember what that panel is called; the Restart Oversight Panel?

MR. MYERS: Restart Oversight Panel, yeah.

MR. GROBE: You indicated earlier today that the next meeting, maybe it was yesterday, the days are running together, that the next meeting is like the second Monday in July?

MR. MYERS: I think so. 15th. 15th, we have the next meeting scheduled.

MR. GROBE: Maybe it would be best to have our next panel meeting the following day. And that way, some of us that are interested come out and view the functioning of that panel and then have our oversight panel. That might align. Okay, we'll be talking about that schedule.

MR. MYERS: I think that would, I would be able to present the management root cause issues to that panel at that time, you know, so that would work out.

MR. GROBE: Okay. I think we've been at it for two and a half hours. Do you want to go more?

MR. MYERS: No.

MR. GROBE: I certainly appreciate the dialogue. Lew, did you have any closing remarks that you want to make?

MR. MYERS: Well, you know, our desire today, we hope we've done this for the public. We've got a lot of conversation between us and the regulators, but we would demonstrate that our management team will take the needed actions to assess all of our technical issues to restart the plant to the best of our ability; willing to see the plant operates safely and reliable and well proved and therefore trust, because right now the plant shutdown in a situation like this, it hurts the employee population. And then we'll work hard to regain public and regulatory confidence. We took a step forward. And that desire after today, that would be a win. Since our last meeting, we made a lot of changes. We put together the restart plan that was only in draft. We put the individual plans into place. We've all racked out heads. We talked about at the last meeting, we were studying, that at the time, the technical feasibility of buying a new head or repairing it. We walked away and basically from the head repair now and bought a new head. Major change in direction. From a technical program standpoint, we're reviewing our technical programs already, so we're in the discovery phase already. Containment condition. We're already into implementation phase. We're still doing discovery, but we're outfitting things like duct work already. So, we're somewhere in between. System health plan; we've already been through a lot of system reviews and we've created a whole bunch of works, mods. One of the things we're looking at is a new cavity seal. Major mod in the plant that kept some of the

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leakage from running down the side of the vessel, you know. So, we're looking at that mod, but we're creating a bunch of work and mods there. From a restart plan, we have the restart plan basically in place. And the management human performance plan, we told you we've been through a lot of reviews with corrective actions. We've had industry experts in. And then we have detail management review assessment going on. Root cause, if you will. And we'll complete that before the next meeting. So, since our last meeting, we've made a lot of progress. And before our next meeting, we'll make more progress. Thank you.

MR. GROBE: Okay, thanks, Lew. I just wanted to comment that I know that we've asked a plethora of very intrusive questions and I think the dialogue has been very helpful. I apologize that this ran long. I think it's very important to get through these last two cornerstones or building blocks. I'm sorry. And, we'll do that early in July, and cover those comprehensively. Again, I just want to thank you for your staying power, your ability to respond to our questions candidly and openly. I think that's very healthy and we'll continue providing our thoughts and insights. And I think the plant has made significant progress in planning its work, and has begun to accomplish some of these plans, begun to implement some of these plans. My experience in the past is that it's absolutely crucial to develop the plan first and get a very solid plan and then go implement it. That way you don't have to redo work. You can go back and redo activities once you realize the plan wasn't sufficient and comprehensive. So, I appreciate the fact that these are still living documents and you're going to be updating them shortly. We look forward to seeing those revisions.

MR. MYERS: Thank you.

MR. GROBE: Any other comments? Bill? At this time, I commented earlier today we had a meeting at 10:00 this morning, and it went for about a half an hour and they took a break before they had public comments. We didn't have that situation. We've been at it for quite awhile. My recommendation is we not take a break and we provide for public comments. We have a meeting at 7:00. If some of you have comments, but were planning on coming back at that time, I would ask you to save them for that period of time, because I'm sensitive to the fact that we're impacting on dinner hour, but I'm eager to hear feedback. So, I would invite you to come forward and speak at the microphone, if you would, please. And I believe on the podium we have a sign-in sheet.

MR. HOWARD WHITCOMB: In respect to your request, at the dinner hour and so forth, is it my understanding that the same individuals are going to be back here at 7:00?

MR. GROBE: No, that's not correct. The evening meeting is going to be NRC staff and might be some of the public. I'll provide a brief overview of what was discussed this afternoon, and then respond to any questions. For those folks that want to have a detailed understanding of everything that transpired this afternoon, the transcript will be available in a couple of weeks, and they can read the transcript.

MR. WHITCOMB: Well, I would like to ask one quick question to First Energy, since they're not going to be back this evening. To Mr. Myers, you've heard Mr. Fast describe a situation in which he felt it necessary to invite certain of his management out into the plant, and undergo one of these teachable moments. I've never heard that before, but I think I understand what that means. Mr. Myers, what would be your assessment at this point as to why was that necessary?

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MR. MYERS: You know, I think our plant ran well and did well for many years. Probably one of the better plants in the country. Sometimes it's easy to get complaisant with that, because the plant has performed so well. And, our managers were not getting into the industry as often as they should. Looking for the highest standards of performance. There is minimum standards of performance, what I call regulatory performance; and then there is a margin above that. And we need to start teaching how to have the margin above that. And that's not in all cases, but it is in some cases. Like the operator is walking into the containment, finding rust on stuff. We needed to address that one apparently some time ago. Missed opportunities that we've had in some areas are just a reflection of letting our guard down, our standards down. And that's, that's the reason I didn't blame it on the people. That's a management problem, because it's something we always have to guard against and that's complaisancy.

MR. WHITCOMB: Would you consider that to be a management problem from the plant management, plant manager level all the way down to the lowest levels of supervision?

MR. MYERS: Yes.

MR. WHITCOMB: Okay. Now, you also indicated that you don't have a plan yet completely developed as to how you address that, but it is your intention to address that?

MR. MYERS: Yes.

MR. WHITCOMB: Okay. Mr. Fast, you indicated earlier in your VT-2 inspections, the five individuals that had prior experience. Are they somehow required to be part of the team that's out there in the field with the inexperienced people?

MR. MYERS: Before you go on to Mr. Fast, I would like to clarify a statement. Don't look at our performance at the Davis-Besse plant. It's still, in a lot of areas, it's still performing at some of the highest industry standards. Our industrial safety records are outstanding. Protection technicians are outstanding. There is still of lot of areas at our plant that I would say are as good or leading the industry. There are some areas like in the, that we're seeing, that some of our standards may have slid some. Operators not getting into containment results as they should. So, I would not classify our performance as mediocre from top to bottom. There is some pockets of areas that we probably need improvement. Generally, our overall maintenance, the general condition of the plant appears to be good. So, I don't want to classify the plant as just falling apart. It's, the plant is in very good material condition still all in all.

MR. WHITCOMB: But you would agree with me, sir --

MR. GROBE: Howard, this point in time was intended not necessarily for questioning the utility, but it's intended for the NRC staff to receive input from the public, to respond to questions from the public. And, if First Energy has additional information that they want to present in response to a question, that's fine, but that's not the way we structured our meetings. This time period was intended for members of the public to ask us questions; us meaning the NRC, and to provide us their insights. And if First Energy wants to provide another forum, a different forum for members of the public to directly ask them questions, that's fine, but that's wasn't the intention of this portion of the meeting.

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MR. WHITCOMB: All right. Well, then, I'll be back at 7:00 and I'll direct to the NRC any other comments that I have at that time.

MR. GROBE: Okay.

MR. GUNTER: I'm Paul Gunter. I'm with Nuclear Information Services. I guess my concern is directed to the Nuclear Regulatory Commission to statements we just heard here from First Energy. Does the NRC really believe that First Energy radiation standards are some of the highest in the country after the most recent recorded incidents where employees walked out of there with hot particles? That seems, it seems to fly in the face of what we just experienced. And even most recently, how is the public confidence to be restored, not only in this plant, but in the regulator? And that's the challenge that is before this regulator. If any of us are caught running through Oak Harbor and exceeding the speed limit, jeopardizing public health and safety, there are consequences. This utility, particularly this management, should not be allowed to proceed without some consequence from the regulator. And the question to the regulator, the challenge to you, is what consequence will you mete out to this kind of system, this management that's been going on for years?

MR. GROBE: Thanks, Paul. I think you asked two questions. The first one concerned the recent event involving hot particles; and, I think that's an excellent question. I'm not sure what Mr. Myers was referring to. I believe there is a number of different indicators that give you an insight into performance into radiation protection program. Some of those include, for example, overall exposure to the workers at the plant. And there is a whole series of other indicators. We have performance indicators that are posted on our web site that we look at. And the plants have many more indicators that they use to measure their performance. With respect to the hot particle event, that's an issue where we conducted a special inspection. The results of that inspection are undergoing evaluation, and should be issued shortly. And those findings of the inspection will be characterized correctly. There are a number of issues that were identified that were not good performance in the area of radiological protection. They were very narrowly focused on how the licensee handled individuals who perceived internal contamination; and that's part of radiation protection program and part of the risks at a nuclear plant. It's possible for nuclear worker to receive what's called an uptake of radioactive materials. And when a worker does have radio uptake of radioactive materials, it complicates the ability to determine whether or not they have radioactive materials on the external of themselves. So, there is a number of issues there and we're evaluating the issues of that inspection and violation with respect to that issue. In respect to overall plant performance, the findings, AIT inspection, there is a number of inspections to be done, referred to some of them earlier today. There is a number of ongoing inspections right now. One of them is conducting an evaluation of extended condition inside containment. Don Jones is out at Midland watching radiography and evaluating that, and we'll see that activity. There is a couple of folks in the region that are continuing to work on following up the results of the Augmented Inspection Team. And concurrent in that, we have quite a few people working, both agency people and contractors, on evaluating the safety significance of this event. And, once we complete the follow-up on the Augmented Inspection Team and the Safety Inspection Analysis, we'll be able to characterize the violations that have occurred and the risk significance of those violations and deal with those appropriately within our procedures. But those are excellent questions and I appreciate your input. Thank you. Are there others? Nobody else has any questions? Okay. Great. Thanks. I certainly appreciate your attention to this meeting. As I mentioned earlier, we're going to have a meeting that will

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convene in this room at 7:00. The outcome of that meeting will be to communicate, to communicate the result of the meeting that occurred this morning. That was a meeting of the Lessons Learned Task Force, and then also to communicate the results of this meeting this afternoon, and field questions from the public that they may have.

Thank you very much.

(Off the record.)

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 27th day of June, 2002.

Marie B. Fresch, RMR  
NOTARY PUBLIC, STATE OF OHIO  
My Commission Expires 10-9-03.