work will probably be complete late this weekend or very early next week.

And then of course we go in and pour concrete back into the shield building again, restoring the containment back to its original design specifications. And later on in the process as we complete the rest of the work in the containment building itself; do an integrated leak grade test on the containment building to assure ourselves that it is a leak tight containment pressure vessel itself.

Now, this job has gone very well for us, but it has not gone perfectly. The next slide shows a couple of difficulties that we've encountered along the way, caused us some schedule delays.

One was simply waiting for piece of equipment that we use to move those heads; that was the polar crane upgrade that Mike has talked about.

Then after we had moved the head in, we were preparing to restore the containment. We did have some work practice, following issues that we had to deal with our contractor here. In our preparation for a couple of these activities, we have to do some training, some testing. One of the testing activities that we had to do is, we talked about it before, verifying our concrete supplier was going to give us high quality concrete. And it's a way, about an hour away from the plant.

So, we had to go through a series of qualifying the concrete, making sure as we bring it onto the site, its transport won't take too long and it will be good concrete when we put it in. And in that process, we noted some failure to follow some of the procedures set up for that testing activity. We identified those earlier. And then, we had identified that on a condition report from our oversight of the project.

Then, as we got towards qualifying the welders to this head welding process, they were in training. And one of your inspectors as well as our project managers were in that training, and confirmed that some of the process documents from the manufacturer with specific setup and configuration we were using were not being used in that training.

At that point, these issues were coupled or aggravated, I'll say, by quality oversight of the job. Bechtel, our contractor, part of their responsibility was also to provide quality control and quality assurance oversight. Of course, we have our own quality oversight. They were responsible to have their own quality people observing what they were doing.

These people were on the job. We had some problems with them not spending enough time specifically at the location inside containment where we wanted them, and also

were in the same class as these categories where this activity was not being done properly and the quality organization is not responding appropriately in our minds.

So, at that point, we identified those concerns on another condition report. The contractor in this case stopped all their own work, put together a going-forward plan for us, and included changeouts of personnel. Re -- I don't want to call it training, but had a standdown with all the personnel involved with this job; reaffirming the expectations and the need to precisely follow the procedures and to make sure that we were provided with quality trained people.

They undertook their corrective actions. They provided us with their plans for going forward. And, we approved that plan and put them back to work on the permanent plan structure.

Now, I said that they were, we did get new quality oversight from Bechtel in that process. We also confirmed that none of the work that was done to-date suffered as a result of any of the problems that we had seen. We did verify that there was sufficient quality control oversight.

The real job of certain, taking the concrete out, is not, not much to do to harm the rest of the containment there. But in cutting the steel on the pressure vessel

itself, containment pressure vessel, there is some controls that you need to keep by way of keeping that proper heat and stuff. We did have the records to indicate that those heats were maintained, that there was system quality oversight to that, so we confirmed that none of the work that had been done to-date suffered as a result of those.

So, that's where we're at with that. Next couple of things, just a few pictures. This is kind of an interesting picture where the old reactor head is being transporting out at the same time it's going right past the new one coming, on its way in. It was out with the old and in with the new.

The old reactor head is covered in blue. That is a temporary paint that's put on the head itself to make sure that the examinations go right on the head during its transport. That was on its way over to the place where we stored it.

The next picture shows the new head. It's a work platform. Above it is the opening in containment where the crane is moving the head into the containment.

The next picture is --

MR. MYERS: Wait a minute, come back. If you'll look on the head, that's the polar crane. That's the crane we rented to make the lift on the outside, but you see the taped off area at the top of the

gray or the top of the head, that's; what are those?

MR. SCHRAUDER: Right there, these are the new, this is the lower support of the service structure, and actually the next picture we'll go to that. This is the reactor vessel head sitting on the stand in the containment. These gray cores that you see here, are the openings that were made into this service structure, lower support service structure, to enable us to do accurate and adequate inspections of this reactor vessel head.

The new service structure comes on, will sit right on that ring, on the support skirt and then it will be welded into place there.

These things that are covered here, are the bottom flange where the control rod drive mechanisms will be brought over and service structure put on and bolted in place.

That is the reactor vessel. The new reactor vessel head is sitting on the stand in containment.

Next slide shows the old -- not the old, but the yellow picture up there is our service structure as it was standing on the stand. It is a nice new white coat down there in the lower right hand corner. The service structure is waiting to be lifted and placed on the reactor vessel head.

And this, the next picture is just, we talk about

cad welding and placing the rebar and reinforcement bar back to containment. That's what rebar looks like. The center section here is the piece that's packaged onto the rebar. This is actually in a test rig here.

One of the things we had to do is qualify this cad weld while we were doing it. So, we take that in and put it onto a representative piece of the rebar, and then apply pressure to it. And the goal is to have the rebar itself break before this weld apparatus let's loose. In this case, we have a successful activity there where we did break the rebar before the splice was.

Questions on the reactor vessel head, and status?

MR. GROBE: Nope. Thank you.

MR. SCHRAUDER: Okay. The next speaker is Randy Fast.

MR. FAST: All right. Thank you, Bob.

Myself and Jim Powers both worked on the System Containment Health.

Go to the first slide.

We've already talked about a lot of the major projects that we have going on. I just have a couple of items that I want to update in relation to containment health. First of which is our inspections are essentially

completed. We're about 99 percent complete with those inspections.

We had some minor areas that were obscured, because of scaffold or something else that have been noted; that detail has been identified and we'll go back for a subsequent inspection. But the areas are small. We don't think there will be anything significant that comes from those inspections.

The good news is as well, we didn't find a lot of different things. Most of the issues are minor in nature. There is some minor surface corrosion in the areas that have to be recovered, but most of those can be recovered by minor maintenance and using the existing work practices. So, we don't see any major challenges in that arena.

Next item is the containment sump. And if you just go to the next slide, you'll be able to show really a conceptual drawing of what that emergency sump will look like.

Took a page from water technology, you'll see on the far right toward the bottom is the existing emergency sump.

Thank you.

You'll see a drilled pipe that connects to that, and goes to what I'll call a boxcar arrangement, which extends the sump surface area from the existing 50 square feet into

an array that actually will go to upwards of 1100 square feet.

Because of the flexibility of this design, this will also allow us to extend the sump in the other direction. We don't have that artist's rendition here, but it will actually allow us to extend the sump in the other direction around the containment down into the access core that goes under the vessel.

So, this is a very flexible design. I think this is really going to add opportunity for the rest of the pressurized water reactors to take a page from the lesson learned here at Davis-Besse. We'll share this technology and these ideas, and be able to help others. Actually, improving this margin will put us in the leadership role or at the high end of PWR, Pressurized Water Reactor technology in the surface area. We feel pretty good about what we're able to get in the way of containment sump.

And the last item I was going to talk about is all the insulation has been removed in the piping systems and containment coatings walkdowns are completed.

We do have about 15,000 square feet of surface area that are not qualified coatings. We have a couple options. We can take those coatings and evaluate those for qualification, or we can remove those. And, one of the areas Mike had talked about for flood tanks about 3,000

square feet each; those coatings will be removed and reapplied with a coating that does meet the standards.

Those coatings were existing from the original plant design. So, we do have some, about 15,000 square feet of remediation for coatings in the containment.

MR. GROBE: What went into determining the surface area design for the new containment sump? How did you conclude that you needed 1100 square feet?

MR. FAST: Lew just said, as big as possible. This is one of the cases where we gain considerable margin. Because this is an industry issue in having available surface area to ensure that through a design basis accident, that water can free flow and provide the net positive suction head necessary for the pump for recirculation. The larger the sump the better, is the bottom line; and it allows a lot more margin for.

So, we took existing space that was available in the containment and that's why this, this actual boxcar arrangement provided that flexibility.

MR. POWERS: Which also, Jack, there has been some studies on the industry in general or PWRs containment size versus sump size. And we took a look at that, experience benchmarking in other plants and this size will put us at the top, top desk level in terms of

size of sump relative to containment. So, that's another benchmark we used to make sure we had the capacity we needed.

MR. GROBE: Just to make sure I'm clear. You have not concluded that the original sump size was insufficient to provide net positive suction head for the pumps?

MR. POWERS: Let me talk about that. We had a concern as we got into the details to evaluate the sump capability on its size. It's a relatively small sump. And it was designed as were many of the emergency sumps back in the original design of the structure of the plants for 50 percent blockage, and the pumps would have adequate suction through that if it was 50 percent blocked. And that was provided in the regulations, that was the requirement, and we followed that.

Now, on more recent walkdowns on containment health, including the coatings qualification issue, we've found, and as Randy described, we found that a number of areas we don't have qualified coatings. That includes the four flood tanks, there is some smaller pieces of equipment that need touchup work in the containment, and as well as the coating on the dome of the containment requiring restoration because it was beginning to peal off.

So, we found a number of areas where coating may

come off in an accident-type situation. And that's typically from design basis. Accident with a large break, lot of energy, temperatures, high temperature steam is released, and coating can come loose. And if it is enough flow through the containment of steam and condensed water, that coating debris can get washed down to the containment sump and potentially block it. So, that's what we're concerned about.

Now, there is a lot of work that goes behind assessing and evaluating that. That leads to the transport theory, in terms of what are the pathways that, where it has to navigate to get down to the sump. There is in many cases a tortuous path that it needs to take.

So, we're in the process of evaluating the ramifications of the coatings in containment and the size of the sump. And, we're looking where we stood relative to the sump's capabilities in the past. In the future, we're going to have one of the largest sumps in the industry. And we'll have quite a bit of margin over the plant.

MR. MYERS: You know, really it's the coating we talked about. We've got the qualified coating list, provide some of the coatings on the simple things. If we go to another vendor to get that coating qualified, then the issue is not nearly as big. So, we don't know that it couldn't qualified the coating we're

talking about, but the simple thing to do, when you need another coating is take it off and replace it. From a management standpoint, it might be the easiest thing to qualify.

MR. GROBE: When you did the containment inspections, did you find any other deficiencies with the sump?

MR. POWERS: Yes. There was a couple deficiencies we found in terms of, we found one small opening in the sump that didn't meet its specified criteria. The sump is intended to have quarter inch, screen out quarter inch particles from the suction flow. And we found that an opening, small rectangular opening, I think it was in the range of 3/4 inches wide by 5 or 6 inches long. That would not have met that requirement, so that's another, another issue we found with the sump.

There was also some work having done in the past that really wouldn't meet our standards today, in terms of closing off other small openings in screens. And this is typically an industry issue where structural steel penetrates through the screens or the screens interface as a box is put together for a sump, there may be openings that are screen size along those interfaces.

And we found some of those that in the past had been covered over with lead bricks to sit on top of any of those

openings and it doesn't meet our requirements, expectations or standards for modification in containment for the sump.

We're going to rectify that along with this modification. So, there is a couple of other issues there that we're addressing in terms of health and functional capabilities of the sump and where we're at.

MR. GROBE: You mentioned insulation removal, when you complete this work, or it's completed now, does that mean that all fibrous insulation has been removed from containment?

MR. POWERS: I think a large portion of it is going to be removed. Insulation removal is ongoing for continued inspection and pressure boundary of the Reactor Coolant System is part of completing our inspections there. So, that refers to initially going in and engineering replacement of insulation. So, there may be some areas where the established insulation is encapsulated and it's nowhere near any pipe break zones or any other events that could break it free. We're going to the major extent, most of the pipe installation will be removed and replaced with alternative insulation that is not fibrous.

MR. GROBE: Okay. Thank you.

MR. MENDIOLA: I may have missed

this, but where does this idea, this concept come from? What was its origin?

MR. POWERS: Over at the Perry Plant, we put in what was at the time the largest suction strainer in the world during a refueling outage in 1996. That was shortly after Lew arrived at the plant.

MR. MYERS: We've done this before.

MR. POWERS: Right, and that was over a hundred feet in diameter. And the containment at Perry, one of the water reactors is quite different than this. There is a water pool at the bottom that the pumps take their suction from, emergency pumps. And we put a strainer there that went all the way around. Some of the engineers affectionately refer to it as a naval strainer.

But it's over a hundred feet in diameter, over eight pieces weighing four tons each. And we put it in at a refueling outage in 12 days underwater with divers bolting that and putting it into place.

So, we have that experience, and we have brought the same engineering organization to bear upon this, same individuals personally containment walk this down; for bringing this perforated screen concept to this, it's slightly different, but it's the same, same type of concept.

MR. MENDIOLA: It's not exactly what I was asking. But what I'm saying, somebody had to step up. Some engineer someplace said, hey, look, I have an idea; and offered it to you or your organization and my concept with an understanding of how, a radical move idea like this, germinates to an actual plant modification?

MR. POWERS: How the idea goes forth? Really, it's looking to see the longstanding issues at the plant, and with experience that we've brought from the outside, what improvements could be made. In talking to the engineers at the plant on various -- that they would like to see improvements, and asking about this. We knew from our experience at Perry that there was an issue with sumps that were being addressed in the industry, and there is a lot of operating experience in the industry.

So, there was a looking forward to what is going to evolve. The NRC is setting of course some regulations on that in the near future. And, some of the industry groups; Nuclear Engineering Institute, or Nuclear Energy Institute, has provided guidance on it.

Collective significance of all that knowledge on the industry issue led to us going in there and assessing where exactly do we stand and found out that the size of the sump was relatively small relative to the industry peer plants.

And so we put one of our plant employees as a project manager to work on coming up with an appropriate solution and we gave him the resource of our outside engineering firm, to provide designs.

So, they've been working in concert and this engineer is going to be able to see his concept come to fruition. Basically, getting behind it and making it happen as priority for safety function.

MR. SCHRAUDER: The sequence of events, Tony, was we identified we wanted to increase the size of the sump. That was the first idea. Then set a team of engineers in place to say, go look at some options to see how we can be able to increase the size of the sump. And they looked at several opportunities to increase the size, increase the pit size, opening up some more areas on containment.

One of the persons on the team came up with the arrangement of how we should increase the size of the sump.

MR. MENDIOLA: I take it this has been months in the making, years in the making, since the first of the year?

MR. POWERS: I would say we have been working for several months on this one.

MR. MYERS: It wasn't one

person. We brought some stuff in from Perry Plant that we had done. We had an engineering firm there. We were talking about the issues and industry experience. I think it was a team effort.

MR. POWERS: Right, talking with the people at the site, how they felt about it, looking back on it, and where we stood. So, it was a team effort.

MR. MYERS: It was a good team effort. There isn't one person you can point to. It was a team effort. We had the engineering firm together and everybody sat in a room and this is what we hammered out.

MR. POWERS: The nice feature, although it hasn't been going on for a long time, it's made up of perforated pieces of pipe, stainless steel pipe that we bolted together. So, a large amount can be built in the shop in a controlled environment and shipped to the site.

MR. MYERS: Pretty neat.

MR. GROBE: Okay. Okay.

MR. FAST: With that, I'll turn it over to Jim talking about System Health Plan.

MR. POWERS: The System Health Plan, we had talked at the last meeting about the walkdowns coming to completion. At that time, they were just about

complete and we have completed those walkdowns and that was by multi-disciplined teams of maintenance, mechanics and engineers, operators, system engineers and management members going out and walking down systems.

We have our 31 reviews ongoing is what we refer to as Maintenance Significant Systems, System Health Readiness Review level. And those reviews, they're ongoing, making good progress. Each system engineer of the systems had several experienced contractors from the outside that have gone through plant reviews such as this supporting, and they're going through the past work orders, modifications and corrective actions in our system, to assure themselves that the right thing has been done; and if not, we have questions about it and document it on a CR and Corrective Action Program for evaluation.

And thus far, we have had 500 of those questions in the Corrective Action Program, that the Restart Safety Review Board has categorized as restart related requiring evaluation prior to restart.

We have a pretty low threshold for issues. Walkdowns, we found a number of small issues. I talked about them the last time. Areas of the plant where there may be some rust. It is a 25-year-old plant. So, there is some areas where refurbishment would be recommended, some cleanliness issues.

There is also a few issues where we needed to make changes to restore operability. So, we had the full gambit of small housekeeping observations to equipment issues. And, good thing about the whole process was we have teams of people working together to find out what standard they had been living to and was it really acceptable to them collectively when they got out as a team. They found no.

It was easy for them to write down things they felt were areas for improvement, and we got positive feedback even from the maintenance people on the teams. They thought it was very worthwhile to get together with some of their other peers, working together. We're going to carry that forward into a future requirements over at the Davis-Besse Plant and other FENOC stations to do these type of walkdown reviews.

We have five of the System Reviews have been completed by the responsible engineers and their teams. Of those, there is four reports that were prepared and sent to the Engineering Assessment Board. Two of the reports were approved in terms of their comments noted on those, are being incorporated now, but they passed muster through that review board.

Two of the other reports need further work before they go entirely through the board. One is getting, addressed to get prepared for the board. It's issues like

format, consistency and looking at this work for several of these, we're trying to get comments on these, taking these back to the other reports ongoing.

So, we're at the beginnings of issuing out the product. We have to go to the Engineering Assessment Board and Comments Incorporated. Then, they will go through validation process where an independent team will look through them to see if they meet procedures provided to you. And tell us what we're going to do. When they believe they're completely correct, it goes to a Restart Management Team, which ultimately recommends approval of these reports. And then they'll be available for your inspection.

So, we're beginning to see that process now, and continuing that. I think it's bearing fruit in terms of improvement to the plant and raising the standards.

Next on Program Review?

MR. MYERS: Yes.

MR. POWERS: Approximately 70 percent overall completion is how I characterize where we're at. As you know, we have two levels of system reviews; the 31 systems we're talking here; the maintenance, our working system.

We also had five systems that we were looking at in greater detail, very eye level detail. We had good

sampling, digging down to things like calculations and design basis. And those are going along pretty well also. And overall, I would say our effort is about 70 percent through.

We've done an assessment recently on how well we're doing in terms of staying on track, because we do have multiple teams working on individual systems. We want to make sure we have consistent quality, consistent expectation of driving into the documentation and following threads on issues that are found. So, we've some individuals, experienced individuals, who are planning recovering items and assessments and we think we're doing pretty well.

Reinforcing the people of quality. It's important, important to schedule. We want to make sure quality gets incorporated completely into the effort. We're looking at our management team every day to what we can do to provide resource, remove obstacles and barriers to get the work done on the schedule, but with the appropriate quality. So, that's what we're, that's what we're about.

In terms of issues, there is tremendous smaller issues. We're looking at those. We're looking at those from a microsignificant standpoint of getting into evaluation of the issues to see, see that there is, if there is anything major.

One of the ones I wanted to talk about was tornado missle protection. I think I touched upon it in the last meeting. This would show a typical issue that we've come up with in the plant, and given this plant is 25 years old.

This is the missle shield that's over in exhaust, an exhaust pipe, if you will, from diesel generator at the plant. And during the system health walkdowns, it was found that the attachments on the parapet on the building roof, there was some standing was cracked and it was falling, probably from water intrusion and freeze/thaw, cracking in the concrete.

So, that is not acceptable. That's not standard we want to abide by when we're out there in the plant. So, that's being addressed, and resolved.

We're also, as we address this, we're looking at a broader picture on our tornado protection features at the plant and looking more broadly on how we stand at tornado missle protection. And we have that up to par the way we want that, to importance of license basis and sign basis of the plant. There is more work in that area.

MR. GROBE: Jim, missle shield is a concept that we talk about all the time. Folks in the audience might not understand what you're talking about. These are not SCUD missles. Let's talk about what

a missle shield is.

MR. POWERS: Right. At the nuclear plants, we design in case of a tornado, a tornado can pick up missles like, that might be lumbar that's around the plant, or trees or fencing, or you know, you've been out in the tornado damage. Well, we're designed for the maximum credible tornado in the area to withstand that in the plant for safety systems. So, they have barriers over them to protect them from tornado missles.

So, that's what this is. And, that's what tornado missles is about. Thank you.

Okay, the next slide.

I talked about recent assessments of how we're doing with System Reviews and work is on track according to the plant. We're essentially answering the right questions, working our way completely through the plants. We do have some issues I'll touch on briefly. We're several days behind, and as I mentioned, we work with this every day to see what we can do to help the teams be successful, get the work done, high quality for the plant. Targeting the schedule we would like it to be.

A couple of technical issues we'll be working on that's been identified, our Aux. Feedwater System. There is strainers in there to pump function. There is a function in the system that would be provided from not in

it's normal source within the plant concept system, but from the Service Water System.

And service water to the systems take outside pond water, if you refer to, refer to it that way. And, process it through the system. And that, those pipes can sometimes collect silt and dirt, and there was a concern identified that it's not used very frequently, so that supply may need to be cleaned to make sure it's clean and won't block the strainer; and also inside the strainer, whether that needs changed.

Another one is HELB stands for High Energy Line Break. In the plant, we look at our high energy line, a 200 pound PSI pressure lines, and if they were to break, for some reason, what would happen. And we protect all throughout the plant the important equipment should that happen sometime.

And the calculation basis of that is the engineers going through and looking at this. This is part of the System Reviews. Looking at this type of detail, how, what state of calculations are easily retrievable. They reference each other well. They've been kept up-to-date. They meet today's standards for analyses and calculations.

And there is areas in here, collective significance of some of the issues that they've found. We'll be going through those calcs.

That's kind of, two typical problems that we identified. We think what we've seen so far the restart activities that are being accomplished in the plant. The corrective action documents that we're issuing; issuing a number of them every day as we go through here and finish up with them. We do them, and turning our attention to evaluate them, not only individually, but collectively what they mean, and putting resource on them.

It's going to be a process of discovery, as we then go with a problem that's been identified, research it, determine what needs to be done to fix it. Some things may be a minor matter of work. Some things may need more work. So, we're getting that done in the plant. Determine that, and find a lot of resource on that to make sure that happens.

Questions?

MR. GROBE: Any questions?

MR. DEAN: Jim, I had a couple questions. One is going through the System Health Plan Reviews and working with the staff, is I think a good opportunity for you all to reinforce your message regarding standards.

I guess what I would be interested in hearing is, what are you using to ascertain whether something makes it to your restart list, as opposed to what's been a

nonrestart item?

MR. POWERS: Bob could answer that.

MR. SCHRAUDER: I chair the Restart Station Review Board and it is our charge to review all of those documents that have come out for whether they are classified as restart or not.

What we're doing as far as the corrective actions go; we categorize them as either being specifically addressed on the O350 criteria. That's table one.

Table two is a series of related things to deal with nuclear safety, radiation protection, reliability of the plant, a couple of other activities. And then there is another category, there is minor maintenance does impact the functionality of the system, some minor issues.

We're taking each of the CR that comes out on a daily basis. We put it back to the first day of the outage, an issue for. And myself, and the production, what I call the production managers at the plant, that is the operations manager, the design engineering manager, plant engineering manager, radiation techs manager and maintenance manager sit on a daily basis, go through those lists and see how they match up with those two tables.

We're also looking at work orders, at all the open work orders. We're looking at determining whether they are

needed to be done prior to restart. How they impact the, potentially impact the functionality of the system. Are they on-line work? Are they just old issues that we've decided we want to get done?

The work orders we've categorized as a series of one hundred, two hundred, three hundred, four hundred; let's take one hundred; those represent issues that are again identified as part of the head issue and the review process.

Two hundreds are as management just said, we are going to complete these prior the restart and we are willing to hold up the restart if they're not completed.

Three hundred are a lot of less significant issues that we're saying, well, we're down right now. We have the work force here that we have. We would like to get as many of these tests accomplished as possible, but we do have some flexibility. If they don't get done, we can come back to them before restart and decide whether we can complete them or not.

And four hundred, are items that are on-line work activities that aren't impacting the systems capability, and they can be scheduled for after the outage.

That's kind of the process we've been through. We're also looking at seeking changes and we'll look at, what we've done first with the corrective actions is as CRs

are written, we first categorized whether the evaluation itself on that condition needs to be done prior to restart. Then, for all of those that we evaluated prior to restart, we'll go through a similar process to determine the corrective actions that come out of those evaluations need to be done; which ones need to be done prior to restart and which ones can be scheduled after the plant is restarted.

MR. DEAN: So, the decision making process is really an expert panel chaired by yourself and other key managers of the various departments?

MR. SCHRAUDER: That's right. And we also have, we do have an expert on the panel with us, that is going through these. And QA organization frequently comes in and observes our process and monitors how we're doing.

MR. DEAN: Second issue I want to raise.

MR. MYERS: Can I have a moment?

MR. DEAN: Go ahead.

MR. MYERS: One of the things that we've done --

(Requested speaker to repeat.)

MR. MYERS: A couple things

that we're done at our other plants in FENOC, and we've institutionalize here, we do a restart assessment with the senior management team, why we should restart. And we'll do that prior to, before ourself.

And, usually that meeting will last a couple days and we'll bring in various groups, including a private panel, and do an assessment of our overall work outstanding and work we got done, are our departments ready to support restart, our training we've done. And so before we ever move up into Mode 4, we'll sit down for a couple days and do that overall assessment in an integrated manner, until we feel comfortable that we're prepared to go forward.

So, that's something we haven't done at this stage of the process.

MR. DEAN: The second issue I wanted to raise, you talked about the System Health Reviews, but there is also, you didn't provide any information that I saw on five or unless they're included under the five maintenance system reviewed, the latent issues review?

MR. POWERS: Those reviews are going forward. They, the team is making good progress there. We're finding some other issues. In the case of those, we're digging into design basis. We're finding some issues there in terms of calculations and how they can be

cross-referenced.

We're looking to testing programs that have been done for the systems and how well they are linked to the design basis calculations and licensing basis. And, we're finding issues in those areas. And as we get those Condition Reports in, we'll be evaluating that collectively, see what the overall picture is. That we're making pretty good progress, you know, we found some issues, nothing, nothing great.

MR. DEAN: I guess my question there, it would seem to me that the latent issue review would be the process by which you would determine if you had other systems, safety systems that were impacted, similarly reactor vessel head was impacted, due to the determination of latent type issues. So, I was wondering if you would see anything that would replicate that pattern or have some of those factors that you've seen?

MR. POWERS: No, we haven't seen anything, we haven't seen anything specific yet. I talked a little earlier the fact on that line, line break calculation, collective significance. That would be one of those cross-cutting issues.

This is one we found specifically the Auxiliary Feedwater Pump Area. We'll be assessing that to see extended condition, is this a whole set, type of

calculations, needs to be improved or not. So, we are seeing that sort of thing, but a couple cases like that. Program is giving us that type of information.

MR. GROBE: Thanks, Bill. That was an excellent question. It brought to mind something I think I wanted you to talk about.

Could you talk a little bit about the pipe stress issue that you identified on service water and containment air cooler impact?

MR. POWERS: Right. On the containment air coolers, which are in containment, and we've talked about those in past meetings. We are replacing the containment air cooler coils, which are like radiators. And they cool the containment air, keep it cool; and they run service water through the coils, kind of like a radiator in a car.

And they were degrading because of the Boron in the area containment getting on the cool phase, and into the piping. And so we replaced those, we're upgrading to stainless steel and we're providing more easily inspection of the cleanliness of the inside of them.

What part of the specification process is going through the engineering to put in the new coils, we developed some questions on the past design in the area of these coils. In that the, the annulus, I assume that the

nozzle connection from the piping to the coil, that's basically the bolt to flange connection, was very flexible and that thermal growth in a high temperature condition in containment, thermal growth of piping pushing against those nozzles would be acceptable.

Our engineer is looking at that now, to question that input. So, we're getting good detail in terms of fitting, looking for what's been done in the past, not just accepting things as they are, but questioning them.

In this case, there is a question on that. We think nature nozzles were stiffer than what was assumed in the past analysis of the old coils and we're evaluating now what that means. They may have been overstressed from a code op, stress standpoint, but they may have been functional in terms of some defamation, but maintaining functional capabilities, structural integrity.

So, we're evaluating that captured in the corrective action process, Jack, and that's what that issue is about, an issue we found. And we're addressing it both past operability concerns, plus looking forward on that. We've changed the design of those manifold through pipe connection coils. We've made it much more easy to access and inspect cleanliness inside the piping and now we're looking at probably adding flexible hose fashion, so there is very little thermal stress.

MR. GROBE: Any questions?

Before we move onto Clark, I think you were ready to move on; is that correct?

MR. POWERS: Yes, I'm ready to introduce Clark Price to talk about Performance Indicators.

MR. GROBE: Before we do that, why don't we take a five minutes break. It's 5 to 4 according to my watch. Let's be back at 5 after. Okay, thank you.

(Off the record.)

MR. GROBE: I had a couple of questions during the break regarding the board. I want to emphasize that the technical issue with the crane were not uniquely safety significant. The issue that Mike Stevens identified was a workmanship quality issue, more than it was a safety concern with the crane itself.

The reason I spent some time on that issue was not so much the importance of the deficiencies with the crane, it was more the root cause, as the individual worker commitment to quality and supervision of the workers in the field. The fact that it took Mike Stevens, the senior management out in the field to identify the concern; that's the good news. The bad news is, it was there.

I just want to make sure everyone is understanding that the specific conditions with the crane itself were not

particularly safety standard.

Why don't we get on to Clark.

MR. PRICE: Thank you, Jack.

Good afternoon. My name is Clark Price. I'm the Manager for Business Services at Davis-Besse for the Restart Plan. I am the owner of the Restart Action Plan.

As you've heard, we're making good progress towards our restart, but we also have many challenges ahead and the next slide I'll show will demonstrate that.

One of my responsiblities as owner of the Restart Action Planning Process is to maintain a set of performance indicators for the Davis-Besse Restart Management Team. To both assess our progress towards restart, and also to monitor a number of performance improvement areas that we have targeted in our restart efforts.

The first slides we chose for today's presentation will monitor our progress on three of the building block areas that we discussed today. The restart actions that we'll talk about are those conditions that we have found through many inspections and reviews that need evaluation and correction prior to restart.

And Bob Schrauder explained what the Restart Station Review Board does in the evaluation of those activities. So, that led real well into this discussion. If you have any questions on these charts as I go through them, please

stop me at any time; and myself, or one of the panel members will try to address them. Otherwise, I'll keep going through them.

This first performance measure tracks our Extent of Condition Reinspection on the containment for the Boric Acid conditions. And as you can see and Randy talked about earlier in his discussions on containment, we are just about completed now with those reinspection activities. So, this marks a very major milestone in our efforts for the extent of condition as a result of the, the head issue.

This next performance measure, performance indicator tracks our Open Containment Health Restart Actions. One of the things that we've done differently this time from the last presentation, I need to point out at this time, is that we removed the corrective actions from this performance indicator. We had both the corrective, the Condition Reports and the corrective actions. We were trying to combine them on performance indicators for overall restart actions. It got way too complicated and we weren't able to monitor it well. So, we broke those two part.

This particular indicator here is looking at Condition Reports that have been generated from all the inspection activities as a result of the inspections in

containment. As you can see here, we have over five hundred Condition Reports.

The latest activity you see with the dark bars in the chart represent the reinspection activities that are going on as well as coating inspection activities going on for the last several weeks. As you can see now, the inspection findings and the condition, of course, is starting to drop off in that area.

The next performance indicator is our System Health Readiness Reviews.

MR. GROBE: Clark, before you go on. Each conditional report may have several corrective actions that are necessary to resolve it.

MR. PRICE: Yes, I'm glad you stopped me here. There is one thing I failed to mention. One of the things that we had done with our restart actions, as you can see, our pile got quite high with Condition Reports. On each of these three Building Blocks I'll be discussing here, the restart station, our senior management team has assigned project managers for each of these. And, they are responsible for working, putting together the plans and getting necessary resources to work these Condition Reports off.

Jack, what was your specific question? I failed to answer it.

MR. GROBE: Corrective actions necessary.

MR. PRICE: Oh, yes. It's part of that, as a matter of fact, the project manager who discussed this at the last senior management team meeting discussed about six corrective actions will come out of these Condition Reports on average. With about four of those corrective actions actually resulting in field activities.

MR. GROBE: Okay.

MR. PRICE: You can give an idea how that will expand.

MR. GROBE: Okay, thank you.

MR. MYERS: Again, there is a lot of these corrective actions in groups, like something, or one work order, could be a whole bunch at one time.

MR. PRICE: This also represents the Condition Reports. As Bob Schrauder mention earlier, we've been very conservative in our application of restart required classifications relative to the Condition Reports that come out of all the inspection activities.

Our next phase will be looking at the corrective actions and then also finding restart criteria to the corrective actions. And some of these corrective actions may or may not be required before restart, but a fair

number of them will be.

In the System Health Readiness Review area; as Jim discussed earlier, Jim Powers, we have completed two reviews, our first two reviews now. And they are going through validation process and they will be ready for inspection by the NRC.

In the small box there you can see that we have a number of them, these are in various phases they go through, so there is a lot of work going on in the System Readiness Review area with 25 of those that have been scoped out to be Engineering Assessment Board; five are actually ready for the Engineering Assessment Board review; and two of those that have actually gone through the review. So, eventually, the far right box in the right will fill up to the 31 counts of service, which this is completed; all inspection reviews are completed.

The next slide shows all the efforts of the System Health Readiness Reviews. Offhand, also the Latent Issues Reviews. Also, what falls in here, should note is the Operational Readiness Reviews that were done earlier in the year. All of those have been formulated into Condition Reports for corrective action. But these Condition Reports here now again, were developed with in excess level of five hundred Condition Reports that have been identified as walkdowns and reviews, part of the Restart Action Plans

underneath the System Health Building Block.

You can see from this graph another thing that these graphs are helping us to see, in the dark bars in the graph are the incoming Condition Reports each week. And, about three weeks ago, we see that we peaked out as the inspections and walkdowns were being completed and Condition Reports were being generated as a result of those, that happened in the last three or four weeks.

Now we're seeing that tapering off. So, we believe we're well getting through the discovery phase on this. Although the Latent Issues Reviews, which are probably the area where Bob would say 50 percent complete right now, we still generate some Condition Reports going forward.

Again, we have a project manager now assigned to work on these directly associated with getting the resources and putting together a plan to work down the Condition Reports to get those evaluations completed and corrective actions identified for System Health.

In the program area graph here today is representing Phase One Program Reviews. This is the Program Reviews; we're doing 66 of these. And, what this graph represents is that we have completed now 15 of those reviews. They have gone through the Program Review Board and approved as ready for restart by the Program Review Board. So, we're making good progress on that.

There are another 17 that have been conditionally approved by the Program Review Board, but they will require going back to the board for final approval before we take credit for them.

MR. GROBE: You just said something, Clark, that confused me. Let me make sure I'm understanding this correctly. I've looked at, I cheated and I looked ahead a couple pages too. I would describe all of these as discovery activities, meaning completing inspections, completing reviews to discover whatever problems you think you need to fix. You just said that with the Phase One Program Reviews, those that have been completed are ready for restart, but they're corrective actions that came out of these reviews, right?

MR. PRICE: With the program reviews in this population of Phase One, the 15 that are ready for restart, there were Condition Reports that did come out of those potentially; however, none of the Condition Reports in those 15 were required to be completed prior to restart.

MR. GROBE: Okay. Were those less extensive programs, less significant programs, is that why -- I would have expected the Condition Reports out of each of these reviews out of more complicated programs rather than just fix before we start.

MR. PRICE: There is an initial recommendation made by the Program Review Board and the Restart Station Review Board then goes through the condition report, and either confirms or may disagree with that classification. The two boards get together and when there is any dissension, and come to a decision on that.

These could be more significant or less significant programs. I can't really tell you the population of 15, however they were determined by the Program Review Board to be ready for restart.

MR. GROBE: Why don't you go to the next slide.

I'm sorry. Bob?

MR. SCHRAUDER: A lot of the findings, Jack, coming out of the Program Review that are being documented on the CRs are in fact recommendations for enhancing the program, not necessarily a fault in the program, but an opportunity to improve the program. And those are being asked for the condition reporting process and tracking.

We had things in there like you have a primary program owner, but not a backup to that program. Owners of the program should leave tomorrow, you don't have somebody waiting in the wings to step into that. That's one that we would not categorize as required for restart, but good

enhancement to the program.

MR. GROBE: Why don't you go on to the next slide.

MR. PRICE: Again here, we have the Open Program Compliance Restart Actions. Again, these are coming out of the Phase One Program Reviews and the Phase Two Program Reviews.

As you can see here, we have in excess of 140 that are currently open. One of the things we see happening in this area of the programs, is as we were writing Condition Reports they're also going, they're being evaluated kind of an as we go basis. So, we've had over two hundred Restart Condition Reports identified. We're around 50 to 60 of those have already been evaluated and corrective actions identified out of them.

So, this performance measure is showing us that, again, we're kind of getting through the large review phase. We're seeing that drop off a little bit, and we're also seeing an increase in evaluations. So, that's one of the things Senior Management Team is going to be focusing a lot of attention on. As a matter of fact, probably on a weekly basis, we'll be preparing the project managers on these three areas to discuss, make sure they have the resources and getting problems out of the way that they have evaluating these Condition Reports.

MR. DEAN: Clark, this is something that triggered in my mind relative to what you're tracking here. The items that are captured under the out portion, does that indicate that corrective actions have been identified and not completed or corrective actions have been identified and completed?

MR. PRICE: They're only identified in this particular chart. We have another chart that we'll track corrective actions.

Okay. This particular chart here now is showing the total restart actions that we have for the plant, have identified through the process to-date. And as you can see, there is over 1400 Condition Reports now are in the evaluation phase and are required to be evaluated prior to restart. And a number of those will require corrective actions that will come out of those that will be required before restart.

As you can see here too on the dark bars down below, we have gone through our peak, what we believe is our peak; again, because of the inspections, walkdowns and reviews that have been going on, we're seeing that those numbers reduce, which is good, but we also now start seeing the lighter bar, which is the evaluations increase a rather significant rate, because as you can see, we have quite a workoff here that we have to accomplish. That's our

challenge.

MR. MYERS: If we don't turn this curve down, we can not operate this plant. I'm sure you understand.

MR. PRICE: Okay. The next three performance indicators are looking more for performance in what we've classified or put in our charts as Organizational Readiness, Human Performance Readiness area. This first chart here is looking at the self-identification rate in our condition reporting process. Let me explain that just for a second.

Our self-identified Condition Reports are those that are identified by workers or management, and are identified before they become really a problem; ends up lending itself to us. Something also in nonidentified pile would be our Quality Assessment Organization, if they discover and write a Condition Report on something, that goes into the nonself-identified. Also any kind of NRC inspection or IMPO inspection or any material assessment would be done, would be certainly not self-identified.

So, our goal in this particular performance member is keep identification rate in excess of 80 percent through restart. And we're doing fairly well in that area right now, but we have to keep our eye on this, because we have had a huge population of Condition Reports that have been

through a self-identification process, they're Building Blocks. And as those now start tapering down, we have to make sure we're continuing to keep that performance.

MR. MENDIOLA: Quick question. On the number of Condition Reports that you have measured here, how many of them would you estimate are contractor identified?

MR. PRICE: Contractor identified?

MR. MYERS: What do you mean?

MR. MENDIOLA: Found by contractors, rather than plant staff.

MR. MYERS: We have contractors in the system walkdowns.

MR. MENDIOLA: I understand.

MR. MYERS: Are you including those?

MR. MENDIOLA: Just to get an estimate of how many are from your contractors?

MR. MYERS: I don't know.

MR. SCHRAUDER: I don't have that breakdown, if we're identifying by contractors. We are getting, contractors are identifying issues and are using the Corrective Action Program, but like Lew said, on a large percentage of the walkdowns that are being done on

the System Health Reviews, so the percentage right now is going to be very high, much higher than our typical organization, because that's what we've got the people out doing, is specifically looking for these and the documentation process is the CR.

MR. THOMAS: The process is once they identify issues under the restart programs, that's a part of them, that they issue a Condition Report when they find a problem; is that correct? I guess I'm curious, maybe this is what Tony's asking, is if you have contractors that aren't working toward, or working the procedures directly, direct them to initiate Condition Reports when they find deficiencies, how many Condition Reports do they generate? Do you have any idea?

MR. SCHRAUDER: No.

MR. THOMAS: They actively contribute to the business of Corrective Action Program, though?

MR. MYERS: Oh, yeah.

MR. DEAN: I think why this is kind of a pertinent question. In some of our earlier discussions we had this afternoon, we talked about the large number of contractors, we had an issue with contractor standards; and one of the things that would indicate to you whether the contractors are operating to

your standards are whether they are inputting into your Corrective Action System issues. So, I think that's what Tony's question is.

MR. MYERS: Some of the major contractors, typically, they did very well. I don't know the number. We can go over, work one out.

MR. GROBE: One more observation in this Performance Indicator. It's good that it's above 80 percent, but I'm not sure I can translate that to the health of the organization, for two reasons; one, is you're only out there finding problems. You're in the discovery phase. So, it would be very surprising if it was lower than what it is. Secondly, large number of the staff, as these guys have pointed out, are not your staff, they're contractors, they've just specifically been brought in, because they have experience and capability in this area. So, it's over the next couple of months, that will be the swerve, if that number stays up there.

It's interesting to me how you define self-identification. Let me ask a question or two. If an operator goes out and finds a fitting on something that's wrong; is that a self-identified? Okay. What if that instrument was recently worked on by maintenance? It might be self-identified that the operator found it, but it's a maintenance deficiency that maintenance work wasn't

performed correctly and it wasn't found during the post-maintenance test. How do you handle something like that?

MR. STEVENS: Self-identified.

MR. MYERS: It's self-identified. Put a note on, this is for management to look at.

MR. GROBE: We've talked about this before, but our inspections, as Christine mentioned, we have five inspections with upwards of 15 to 20 people going on right now. Those inspections are going to focus in a number of areas sequential, first looking at the activities that you've planned and you're accomplishing; then doing an independent inspection to confirm not only the results of our evaluation of watching your people do work, but independently confirm that we agree that their outcome is correct, but also look at the performance indicators in each area and all identity of those performance indicators and whether they tell you what you think they're telling you, and we agree those are items.

As we do our inspections, the Human Management Performance Management Team that was on site last week will be looking at these types of issues to be sure the performance indicators you have appear to be valid and also

that they're sufficient to give a correct picture of what you're trying to identify.

MR. MYERS: I think, right now with all the walkdowns, we know, we try to say, we know that this is good. We don't know that we're that good yet, you know. If we can hold this high a level, as we reduce contractor staff, complete our system reviews, program reviews, that would be better to tell us. Right.

MR. PRICE: Okay, this next Performance Indicator we have is on Root Cause Quality. We discussed this last month. This is just a continuation now. What we have, what we're looking for in restart goals, is a positive trend towards our long term goal of 90 percent approval rate by the Corrective Action Review Board.

This performance measure basically assesses whether or not the evaluations are meeting the standards, the requirements of the procedure and the standards set by the Corrective Action Review Board of which Randy Fast chairs.

Right now we're seeing a bit of plateau in that area, over the period of the restart period where we're tracking, we're seeing a positive trend, but we need to see that still continue to climb.

MR. GROBE: Is this like a rolling average or something?

MR. PRICE: Yeah, it's a weighted average.

MR. GROBE: Okay.

MR. PRICE: On the last performance indicator we have for today is, again, was presented last month, Design Engineering Quality. This is a performance measure that's basically created by the Engineering Assessment Board and is a measure of an average score of the engineering products that go through the Engineering Assessment Board.

The EAB or Engineering Assessment Board scores on a scale of zero to 4, with zero being the best. What you can see here is kind of jumping up and down. Our long term goal, restart goals to stay consistently below 1.0 for a weekly average score.

I believe we indicated that our indicators are showing positive progress, and we believe our restart activities are showing improving trends, but as you well know we have some time to spend looking at these, and over the next several weeks, these are going to become some really important indicators for us to focus attention on.

MR. DEAN: Clark, I have one question. I know what you've provided us here is not the comprehensive set of performance indicators that you have. The vast majority of these focus on, you know, tangible