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

Meeting held on Tuesday, July 16, 2002, at 7:00 p.m. at the Oak Harbor High School, Oak Harbor, Ohio, taken by me, Marlene S. Rogers-Lewis, Stenotype Reporter, and Notary Public, in and for the State of Ohio.

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PANEL MEMBERS PRESENT:

U. S. NUCLEAR REGULATORY COMMISSION

William Dean, Vice Chairman, MC 0350 Panel

Christine Lipa, Branch Chief, Region 3

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

MR. DEAN: Okay, good evening everybody. Let's get started with our public meeting. My name is Bill Dean, I'm the Vice Chairman of the Manual Chapter 0350 panel. This is the third of the evening public meetings that we've had since we formed the panel, so I appreciate you all coming out here. I know we have some competition with the Ottawa County fair, and probably -- maybe a little bit better entertainment there, but hopefully we can address some of the questions or concerns that you might have, give you an opportunity to share those with us.

First of all, I'd like to thank Mr. Stucker and the people here at Oak Harbor High School that made their facility available to us.

If you could, though, Mr. Stucker, is it possible to dim these lights just a little bit here in the front? We'd appreciate that.

Jack Grobe, who is the Chairman of the 0350 panel had to leave, so he's not available.

(To Mr. Stucker) thank you very much.

He's not available this evening, so I'm acting instead, and with me tonight with have a full color array of NRC, I'll start at the far left, Scott Thomas, who's the Senior Resident Inspector of

Davis-Beese; Doug Pickett is to his right. He is the Project Manager from NRR headquarters in Rockpoint, Maryland; Tony Mendiola is Doug's Section Chief in our Division of Projects. To my right is Christine Lipa. She is the Branch Chief of the Region 3 office responsible for the oversight and inspection of Davis-Besse are among her duties. To her right is John Jacobson. John's a -- is it mechanical maintenance --

MR. JACOBSON: Mechanical.

MR. DEAN: -- Mechanical Inspector from Region 3, and then over there at the slide is John Algood. He is actually Resident Inspector of Perry nuclear plant, who's up here this week assisting Scott and conducting inspection program, and we have -- I'm sorry, we've got Nancy Keller who is the admin assistant here at Davis-Besse. She is here helping us and taking care of a lot of the logistics in the back; Rol Lickus, Region 3 programs; Jan Strasma from Region 3 way in the back, Public Affairs, and, I think, Marty Farber is here. Marty's in the back. Marty is here as a -- he's a Region Base Inspector. He's here doing some inspections, inspections following up on the augment inspection team results several months ago. I think

that covers everybody from the NRC base. Down below the pit, we actually have a transcriber, Marlene. This was an issue that was raised at the last public meeting that we had, why were we not transcribing these public meetings. We took that issue under consideration and decided to transcribe the evening meetings so that those people who cannot attend will have the opportunity to share in the observations and insights that are discussed at this meeting, so we would expect, oh, probably two to three weeks, I think, is the typical time frame that it takes for the organization that transcribes meetings to get us their transcription, and at that point we'll make it available on the NRC website.

Hopefully as you came in, you picked up some handouts. There's actually a couple out there. One is just the agenda for tonight's meeting, which is up here on the screen. We also had out there the package that was handed out for this afternoon's meeting with the Licensee, and we'll talk about that a little bit, and also there may have been a few copies of the Licensee's own packet of information that they presented at the public meeting. Some of those were still out there. I'm not sure if there was enough for everybody here or not.

Also out there -- and hopefully you all take advantage of filling out the public feedback form. I'll try to collect information from members of the public when we have meetings to get feedback from you as regards the accuracy of the meeting, did it meet your expectations and so on, so forth, so hopefully you'll take your time and fill it out and provide us some feedback, so that we can make some effort to improve these interreactions with you.

Okay, now, enough of the introductions. Relative to today's meeting which is the second item before we get into the opportunity for you to provide us with some questions and observations, we had a meeting with the Licensee from 2:00, and I think it went almost to six this evening with the last part being some opportunity for answers and questions from the poll, but it was another series of what we our continuing a series of meetings with the Licensee to discuss their progress relative to the return to service plan for Davis-Besse, and it was, by most accounts, I think it was a fairly productive meeting, and I think there was a sense of a transition which is really not unexpected for these types of issues where you have a plant that has a significant event or problem, a shutdown, and they're trying to get

their arms around the issue, and we, the regulator, are trying to understand what is the Licensee doing about it, but I think we've seen some movement on the part of the Licensee in moving from a -- kind of a broad overview plan to actually starting to get some specifics and being able to engage the Licensee on some specific issues, and I'll spend a little bit of time talking about that.

There were two major aspects, I think, of the meeting. One was an update by the Licensee on the status of the Return to Service Plan, and then the second piece was the NRC sharing with the Licensee the frame work of our restart checklist which is a key document for us because that will formulate those activities, those areas where we want to have assurance, all are corrected before we will consider authorize and restart up plan, so those were the two main topics that were discussed today.

Relative to the Licensee's Return to Service Plan, those of you that are familiar with it, there's a number of Building Blocks that the Licensee's has identified, and so they spent some time today going over with us the status of each of those Building Blocks, and I'll share just some of the highlights with you.

Relative to their efforts regarding Reactor Head Resolution, the Midland head that they have purchased to install on the Davis-Besse reactor vessel has essentially completed their inspection. They've cleaned it, and they consider it ready to be moved and prepare for installment down here, so they've spent with us this year, I think, about 30,000 man-hours of effort looking at that reactor vessel head, assuring that it was of appropriate quality to be able to be installed at the Davis-Besse plant, and they believe they have completed all of their activities relative to assuring that that vessel head can be -- can be installed.

We have also conducted some inspections. We've watched some of the things they have been doing relative to testing and radiography of the vessel head, and, thus far, our inspections -- we characterize our inspections upon the licensing to be done to be acceptable. There are some additional inspections that still needs to be done relative to the insuring appropriate documentation is available. Of course, we'll be the looking at activities associated with the effort to put the reactor vessel head through the containment and on the reactor vessel so still there is ongoing work that has to be

done on both our part and the Licensee's, but that's pretty much the status of where things are with the reactor head resolution.

With respect to Containment Health Plan piece, one of the things that we noted is that the Licensee has expanded the scope of their efforts relative to looking at the containment health. Previously, they characterized what they were doing in containment as an extended condition. Basically, whereas the Board asked that that leaked out of the reactor, where did it impact, and things within containment. They have expanded the scope of their extended condition reviews to look at other things besides components that are reacted by boric acid. They are looking at other things like, for example, the vessel liner in terms of integrity of the reactor vessel liner, and they are also looking at things like containing air coolers, and they have discussed their plans to refurbish and improve containing air coolers or the key components like containment and also looking at systems outside containment that carry boric acid within them, so they have expanded their scopes, and we were pleased to see that they have gone beyond perhaps a more narrow focus, and they are looking much more broader.

With respect to looking at their systems, and looking at their programs, I think that they gave us a sense of their plans, but I think those are still in the beginnings of implementation so there really wasn't a whole lot of information to share with us or a lot of issues that we could engage in, in terms of the adequacy of their efforts thus far looking at their systems and looking at their programs other than the fact that we will have some future fairly substantial inspections in both of those areas to make sure that their primary -- or their safety systems and that their important programs that they use to insure the health of their systems are indeed adequate or maintained.

The last area of their plan that we talked about at great length was their Management and Human Performance Excellence Building Block, and we consider -- really probably the most important piece of the activities as we're going along in time and understand why this even happened and the Licensee described efforts that they have relative to forming a Root Cause Assessment Team, and they're probably still at least a month away, I would imagine, of being able to really define the root cause from a human performance and management prospective relative

to why did this event even occur at Davis-Besse, and so a lot of what we would plan to do as a regulator is hinged upon what it is that they find from that cause and in our assessment of the accuracy of that root cause, so that's something that we're going to watch very closely. We're very much interested in what comes out of that Root Cause Team that they've form and certainly something that we hope at our next meeting with the Licensee next month to be able to engage them in a lot more constructive discussion than perhaps what we had today.

I think one key point that the Licensee did try to make is that they showed a slide that basically displayed their management structure for Davis-Besse, and they showed all the individuals in their management structure that's been replaced or that have come on board since early this year, and I think it was about 85 or 90% of their managers are relatively new, having been here since the first of the year, so that's one piece of what they have to do, they have to get managers in place to have the right expectations and the right standards, but the key piece as far as we're concerned is how do they convey and translate their expectations and standards so that those are embedded and embodied in what the

organization does on a day-to-day basis, so we have a lot of interest in this area, and we'll hear a lot on that, so that's kind of a quick snapshot of that part of this afternoon's meeting.

What I'd like to do is ask Christine to just discuss with you very briefly our restart checklist framework that we shared with them this afternoon and then we'll go onto looking at any sort of questions or issues you might have.

MS. LIPA: Thanks, Bill. Okay, one of the things that the -- our inspection Manual Chapter which is the procedure that we're using is called 0350, and that's for a plant that's shut down and has some performance problems, and one of the items of our procedure is to come up with a restart checklist and that will define the actions that the NRC needs to take to access what the Licensee, Committee on the Licensee, has done prior to restart, so what we did we provided today, was just a frame work for where we're headed on the restart checklist and this is a listing of the items that we've come up with as a panel that we believe will be necessary for us to review or do inspections on certain areas to make sure we understand what the Licensee has done in these areas, and so we have received No. 1, Adequacy

of Root Cause Determinations. Obviously that's important that we understand what the root cause was, and then that defines the corrective actions, and then, No. 2, is the Adequacy of Safety Significant Structures, Systems, and Components, and that's other important piece of our checklist because the -- the systems that might have been affected or the structures, the containment, and all the components that might be affected or could be affected by the problems that lead to the vessel head degradation needs to be reviewed. The Licensee is doing a very, systematic review. Our plan would be to look at how they're doing those reviews and then also come up with a sampling method for inspection.

The third area is the Adequacy of Safety Significant Programs, referring them to the programs that the Licensee is planning on reviewing. We will be selecting a sampling of those to review in detail and to look at their methods of what they're looking for in those programs.

The fourth item is the Adequacy of Organizational Effectiveness and Human Performance and this is really very close to what Bill discussed as far as the Management and Human Performance that the Licensee has attempted with Building Blocks, and

we believe that's a very important part of the whole process here, and then the fifth item is Readiness for Restart. Before the plant starts up, we'll be assessing our understanding of the readiness for restart, we'll be looking at the list of the items left on our list and coming up with what other additional documents we need from the Licensee, what additional reviews we need to do and go from there; and then the sixth item is Licensing Issue Resolution. There's a number of licensing issues that need to be resolved that the Licensee needs to perform, submit documents to the NRC for approval on the docket, and we have six or so, so far that we expect to be coming. There may be more, but for right now we have kind of drafted up on this list, so that's what I have as far as our discussion today with the Licensee, was to give them a good sense for what types of items we're considering for a conclusion on our restart and checklist so that they can take a look at what they're working on. That's all I have.

MR. DEAN: Great! Thanks, Christine. Before we move it to the next segment of the meeting, I guess I'd like to offer by a show of hands, how many people this is first one of these

meetings that you've attended. (Indicating). Okay, I think what I'd like to do is maybe have Scott Thomas, who is the Senior Resident of Davis-Besse, maybe just spend four or five items, kind of walking you through the issue and kind of somewhat of a primer of the reactor vessel degradation so that you kind of have a sense and a good starting point for why it is we're here and why this is a significant issue.

MR. THOMAS: I guess this will just kind of be an introduction to nuclear power plant operations. I know there are probably varying levels of knowledge on this issue here, but I guess this will just give a broad base overview of how the plant operates, and this is new to me, too, so we'll see what slides come up next, but we'll discuss those as they come, but, anyway, you've got basically two separate parts of a nuclear power plant. You got the primary part which is in the containment structure itself, and then you have a secondary part outside.

What happens is in the reactor, that's where the division takes place, heat is generated. It's transported to the steam generator here. Steam water is put in the steam generator and water makes steam, drives the turbine, which drives the

generator, which produces electricity. The steam is condensed in a big condenser and the steam water just proceeds and goes in a cycle. The important thing you'll note here is that this -- the secondary root and the primary root were separated and don't come into contact.

MS. LIPA: The containment structure?

MR. THOMAS: Oh, the containment structure basically encloses the primary loop. It consists of two separate structures; the first is the containment itself, and I heard it described the other day, if you can imagine the glass part of a Thermos. Well, the glass part would be the vessel liner -- or, excuse me, the containment itself, which is obviously not glass, but it's an inch and a half thick steel cylinder, and that's the primary containment barrier. Outside of that liner and what you see from the road as you drive by is the shield building, and what that is, it's approximately two and a half feet thick concrete of rebar reinforced structure. It protects the containment itself, so --

Is there anything else you want me to discuss on this slide, Bill?

MR. DEAN: (Indicating).

MR. THOMAS: Well, let's do it this way.

UNIDENTIFIED: Excuse me. Is there a space between the building and the liner?

MR. THOMAS: Okay, let's work on terminology here. We've got the containment, which is the inside, and then we have the shield building, which is a concrete structure, and there's an annulus barrier between there. I would approximate it's probably three feet --

MR. PICKETT: Four feet.

MR. THOMAS: -- four feet of space in between.

UNIDENTIFIED: Were they going to inspect that area, too?

MR. THOMAS: They are in the process of conducting inspections on that.

UNIDENTIFIED: On this, they are?

MR. THOMAS: Yes. Well, on the outside of the containment in the annulus area, yes, as well as on the inside, but those are ongoing. They're being conducted by the Licensee. Okay? This is a picture of the top of the reactor head, and that's what all the fuss is about. This is the area where the cavity is. These are -- these are the

nozzles, the control rod nozzles. This down here is the insulation area, and these are the drives where they connect to the nozzles. This is what actually pulls the control rods in and out. These are the motors that actually drive -- pull the rods in and out that regulate the division rate and reactor. That's about all I have on this one.

If you keep in mind, the last picture, this is the reactor head. These are the nozzles that penetrate the head. These nozzles, the way that the head is constructed is they're a cool, very cold, inserted into the reactor head, and it's a compressor that heats up and there's a compression there, and, in addition to that, there's a chamber out here that welds the nozzle up to the head. Okay? The reason I put this picture up is it gives a depiction of what the cavity -- basic shape and size of the cavity, which would be indicated by this area here. Okay? And this is -- this is the problem, it's a stainless steel cavity which I'm sure you have read about in the newspapers. It's what was left as the containment reactor coolant. This is across, the carbon steel head is approximately six and a half inches thick, and this is approximately three-eights of an inch thick. Any questions on this? Okay.

What this is a picture of is it's an actual photo taken in 2000-2001 of the Davis-Besse reactor head. What you're seeing here is these are the bolts that hold -- the bolts that hold the head on to the vessel. This is the transition from the head to the lower support assembly or lower surface structure, and these areas here are what is called the mouse holes or the weep holes. It's got a number of names, but this is -- this is -- they are approximately five by seven inches is the actual size, and I believe there are 17 around the circumference of the reactor head, and this is where the Licensee would do their inspections from as well as do the head cleaning. Those are their only accesses into the -- into this area. We've got one more here into this area right here in between the top of the reactor head and the insulation. This area here from the bottom of the insulation to the top of the reactor head is approximately two and a half inches, okay, and I would estimate that this is approximately three feet -- two and a half feet, ballpark, so that will give you an idea. Okay, now, put this one back up, please. So what you're seeing here is this the boric acid combined with iron oxide, which is what gives it its red color, this is coming

from the top of the head and the -- the red color is due to the iron that was taken from the cavity at the top of the vessel head and the boric acid and it flowed out of the inspection holes around the reactor head, so -- any questions on this slide? Okay. Any other questions for me? (No response). Okay.

MR. DEAN: Thank you, Scott.

Our intent there was to try and give everybody kind of a quick basic understanding of, you know, what's transpired here, and, hopefully, be able to allow you to formulate or contextualize any other questions or concerns or issues that you might have.

What I'd like to do is move into questions. First of all, offer or ask if there is any public officials or representatives that are here?

MR. ARNDT: (Indicating).

MR. DEAN: Yes, sir?

MR. ARNDT: Steve Arndt, Ottawa County Commissioner.

MR. DEAN: Okay. Thank you, Steve. Steve, I don't know whether you have any questions or anything that you'd like to --

MR. ARNDT: (Nod indicating no).

MR. DEAN: Okay. What I'd like to do is offer then, first of all, individuals that

are from the local community the opportunity to ask any questions or raise any issue. We'd ask you to step up here, I believe there is a sign up sheet to put your name on. If you come up, if you could please annunciate your name, I may ask you to spell it for the of our transcriber, and let's go from there.

So any members of the local community that are interested in asking questions or have any issue or concern or anything that they would like to share with us? Don't be shy.

MR. WHITCOMB: My name is Howard Whitcomb, W-H-I-T-C-O-M-B.

I did attend the meeting this afternoon, and I -- for the benefit of the people that did not and do not have a copy of what First Energy had provided in terms of its handout. I would direct your attention to the Management Root Cause introduction slide in which First Energy attempted to identify in its Initial Assessments the four root cause, preliminary root cause issues, and not in the particular order, but the first one was questioning attitude is not evident in decision making.

MR. PICKETT: What page is that, Howard?

MR. WHITCOMB: 38.

MS. LIPA: 37 -- 38, okay.

MR. WHITCOMB: I think the "Questioning attitude is not evident in decision making process" I think that's pretty self-explanatory.

The second that they identify is a "Lack of management oversight has resulted in lax rigor in process implementation." I'm not so sure that I fully understand that item completely.

The third is "Standards have existed for many years that lacked rigor in problem solving." I'm not sure that I completely understand that one as well, but the one that I have the most difficulty understanding is that the fourth one, "Strong management, slash, leadership tends to improve performance, teamwork and ownership." Now, I would ask this panel, could you offer an explanation as to what that means to you, and I understand that, perhaps, you've only first heard that this afternoon, but you've had the benefit at least of the evening hour to look those materials over, and I'd like to have some sort of response to that if I may.

MR. DEAN: I had a similar reaction, Howard, when I saw that slide, and I think

without having the benefit of the Licensee here to ask them to explain, I think the point that they were trying to make there is that management, senior management, can have an influence through the force of their own behaviors, and, you know, their activities can have an impact on performance to some degree that could potentially mask underlying cultural issues. That would be my guess as to the point they were trying to make. Can you add onto that, Christine or Scott?

MS. LIPA: The way these items are listed they are called insights, but three of them almost seem like problems they found, whereas that that you're pointing to is almost like a problem that they know is true that you need to have strong management and leadership to have these positive things, so it is kind of -- so it doesn't match with the rest of them, but my understanding is similar to Bill's, and obviously as you heard us talk up here, and we challenged the Licensee and that up here today, what are you doing and when you are going to have more of a concrete -- so this is an area we spent more time on and we can't say much more today.

MR. DEAN: Scott, do you have anything?

MR. THOMAS: No, I mean, I agree with your assessment.

MR. WHITCOMB: Okay. The next question I have is at the last meeting there was some talk about some criminal investigations that were underway at Davis-Besse. Is there any status -- updated status that you can provide to the public tonight regarding where we're at with those criminal investigations?

MR. DEAN: Again, all that I know is that they're still ongoing. Those are, I think we discussed at the last meeting, actually there were several different investigations that were going on.

One was investigation of NRC's own Inspector General which looks at NRC staff activities and performance.

Another investigation involving our office of investigations which looks at Licensee performance issues, and, other than that, generally those investigations are fairly closely held. There hasn't been any investigation until they feel that they're ready to come forth with their findings.

MR. MENDIOLA: Additionally, there is, of course, Congressional investigation going on by the House Committee and Energy and Commerce, and

we have been currently involved, if you will, in the fact-finding stage finding and providing documents to that committee.

MR. WHITCOMB: Okay. Lastly, I have a general comment, and since it's being transcribed, I'd like to get it on the record. The reason you folks are here tonight is because of an event that happened at Davis-Besse, and you are standing before us, sitting before us, the public, and I guess to some degree, you're trying to either maintain or regain public confidence in your abilities as a regulatory agency.

I find it troubling, however, when we have these meetings, particularly afternoon, the Licensee's here and the NRC is here. We are not able to direct questions to the Licensee. I find that troubling because it appears, at least for myself, that you're running interference with First Energy. I think that the public ought to have unfiltered access to ask questions of the Licensee because it is their mismanagement that has brought all of this to light. It's not the NRC, per se, and I feel that your requiring the public to direct questions to the NRC is essentially running interference and protecting the Licensee. Thank

you.

MR. DEAN: Thank you, Howard.

MR. LODGE: My name is Terry Lodge, L-O-D-G-E.

I'm not a local resident, but then I don't know how you exactly define that term. I don't know how far away from Davis-Besse makes you not local. I have a number of observations and questions. I've read the three sets of questions the Union of Concerned Scientist has postulated to the NRC.

One of things that jumps out at me in the news coverage, in the presentations that I've been to and the UCS review of documents, as well as the website that the NRC maintains is that there's a condition that pertained for at least two and a half, three years, perhaps even longer where radiation monitor filters were disabled or at least required replacement every 24 to 48 hours instead of annually or even -- or pardon me, instead of every other month. That concerns me because as a layperson my understanding is that those monitors inside the containment would be violating necessary -- in the event of a severe accident scenario, any number of accident scenarios, it would be necessary to know the levels of radiation

emanating from their reactor.

I've reviewed and listened to the, what I take to be the work plan, the checklist, the punch list, that the NRC is following at this point, and I think it's rather superficial. It's -- it seems basically aimed at insuring that there's good engineering, but that many unanswered questions appear at this point as overseen by this panel destined to remain unanswered. The UCS has inquired of the NRC about the status of a couple of motor-operated valves that the bolts to which appear to have been corroded away, perhaps probably by the boric acid vapor exposure, the long-term exposure within the containment. I know that there are miles of cable, that there are numerous electrical appliances, motors, devices, switches, all kinds of things inside the containment building. Your focus as regulators seem simply to be narrowly fixed on making sure that if the Utility wants to put a new head on that they do a good job. I am concerned as the UCS is concerned, as the 14 -- 14 groups that join the Union of Concerned Scientist in the petition are concerned about the rest of the story, the other things in the containment structure, prolonged exposure to boric acid which is established certainly

can create corrosion problems beyond the bread box hole in the head. We need to know everything before the reactor is allowed to restart. The problem I see this panel and, indeed, the NRC working itself into is, the Utility in its own economic interest is hurrying around post-haste trying to get that reactor head down here, get that hole knocked inside of the containment, get it installed, do all that's necessary so that you can tee things up so that at the first earliest possible moment that the NRC gives the go ahead, they can go. It's costing serious money, but it took years and, indeed, the Agency has before it, well over a decade's worth of serious maintenance deferral neglect problems, of failures to respond to NRC inquiries, apparent incomplete inspection activities, tons of things, so the Utility got itself into this miserable position because as it admits there is not an evident questioning attitude and decision making. I'm sure that there is an economic progma at work here, not a scientific access.

So my question is, is as I think Mr. Whitcomb underscored to you, are you leading, are you following, or you just going to give the rubber stamp of approval to good engineering, or are you going to

require some relevant scientific inquiry as well as engineering into the precise status of this aging reactor which has produced a most unique problem?

I have said it before to this panel -- well, not to this panel, but to the NRC, this is an evolving technology to start with and this is a novel experiment within this evolving technology. The problem is and the problem has been for more than a quarter century that this evolving technology is out in the environment sitting by Lake Erie. Thanks.

MR. DEAN: Terry, I've got a couple responses to some of your issues. The first issue you raise relative to the radiation monitor and filters and the fact that the Licensee was changing them out every one to two days and your concern about the volatileness of that act scenario, the filters or the radiation monitors that were impacted were radiation monitors are called air particular monitors and basically they would draw a sample of the airborne environment, ascertained if there was airborne particular, airborne radiation, but those aren't the only radiation monitors that existed in the tank, first of all. There are a number of area radiation monitors that exists that would detect increased levels of general radiation inside the

reactor. The Licensee has in the past been able to draw samples out of the containment using portable filters or portable monitors and ascertained the airborne environment in the containment, so the issue in terms of the volatileness of that radiation monitoring or making a decision, for example, if there were an accident, potential accident, recommendations had to be made. There is a fairly wide range of instrumentation that are available to the Licensee to help them make that decision so that instrument alone is not relied on to make that decision, so relative to the potential for that radiation monitor were to be become disabled during an accident that that is not the sole instrument available for that purpose.

MR. LODGE: Thank you. I appreciate that response. As I understand it, though, however, this particular accident scenario has never been considered in the design basis, accident possibilities for Babcock and Wilcox's reactor. Had there been a perforation in high pressure geysers water shooting out of the reactor, out of the head, you can't correctly or at least authoritatively say that a great many of the features you just described would have also been disabled.

MR. DEAN: The -- well, in fact, you're incorrect. The possibility of a LOCA in containment certainly is within the bound of analysis and this would have been a LOCA on top of the reactor vessel, okay? That's not -- that's within the mounting analysis from a large double ended sheer of huge 36 inch reactor hot lake pipes to small perforations or at least from small penetrations, that whole range of potential accidents are bounded by the analysis that exist for nuclear power plants, so if they leak or rupture from the top of the vessel head is within the analysis of the plants.

MR. MENDIOLA: (Nod indicating yes).

MR. LODGE: But is a LOCA of that type analyzed in light of the possibility of prolonged borated acid vapor exposure rusting valves shut, for instance?

MR. DEAN: Well, now, I'm not exactly sure that I understand the question. Are you postulating that all of the equipment in containment wouldn't work because of this boric acid?

MR. LODGE: All or some.

MR. DEAN: The Licensee is required by technical specifications to conduct periodic surveillances of all of their safety

equipment on a fairly frequent basis depending on what the equipment is, so that there is assurances over time that all the safety equipment will, in deed, perform as it is functioned, so, you know, it's hard to envision that the type of scenario that you're postulating there to exist if the Licensee were excluding their ongoing safety systems --

MR. LODGE: Do you feel that the Licensee here was doing that?

MR. DEAN: Well, it's something that we -- that we inspect on an ongoing basis. We look at their -- we sample their surveillances and they're testing, and, you know, I asked Christine and Steve in terms of, you know, our assessment of the license and ongoing surveillance programs and safety systems, but --

MR. LODGE: Well, but let me give you some specifics.

In 1999, the pattern of daily replacement of the filters is occurring. In 1999, the two cold water valves are discovered to have bolts corroded and apparently missing, I think, as to one of them. Nobody puts two and two together? There's nothing --

MR. DEAN: That was going to be the second part of my response, that, indeed --

MR. LODGE: Okay.

MR. DEAN: -- there were a number of what do you want to call it, connect the dots that the Licensee just didn't put together, and I think those things that you -- that Howard went off relative to attitude, lack of standards, so on, so forth all contribute to why is it that the Licensee didn't pull all of that information together, and as I mentioned at the outset when we talked about this afternoon meeting, the area we're most interested in as a regulator is the why? Why did we not have the capacity to connect all those dots, and what does that say about the culture that existed at this plant, and what are you going to do about it to make sure that that culture is not -- you know, is not existent.

MR. LODGE: And what is the Utility telling you about the culture that existed and what are they intending to do about it?

MR. DEAN: Well, you heard Howard read off what their initial insights are causes of evaluation. As I mentioned at the beginning of the meeting that there is a cause team looking at, if you want to call it, the soft side management, performance issues that are associated with this.

They're still looking at that and they have like a nine or 10 person Root Cause Team, combined people from outside the organization, people from within the organization, people that were associated with the technical root cause evaluation, a fairly broad team, including outside consultants that specialize in root cause evaluation trying to pull that answer together, and in our mind that's the most important answer that we're looking for.

MR. LODGE: Thank you.

MS. MIRINGU: Good evening.

MR. DEAN: If it's easier for you just to take it out and hold onto it, it might be better.

MS. MIRINGU: My name is Beatrice Miringu, and it's spelled B-E-A-T-R-I-C-E, and my last name is M-I-R-I-N-G-U. I was at the meeting this afternoon, and one of the things that they did say was they have past -- they have past -- in planning part of their program and now they are at the implementation stage, but when I look at the one for Davis-Besse restart I think this is -- this is what they -- this is where they should be, making sure that all of these things are correct and establishing that all these things are correct and

where they should be before they can talk of implementing their plan, so what I want to hear from this panel is whether maybe First Energy is misleading us in saying that they are implementing their plan when, indeed, you have it all -- all -- I want to know whether you are aware of them implementing yet on this checklist that you reviewed today?

MS. LIPA: Yeah, I think I understood the question because you asked a similar one earlier and when the Licensee gave their presentation today, I think I was a little surprised the way they described it with the three things; I think the first one was upon discovery and implementation, and as we did talk to the different plans, I'm not sure I'm convinced that they are at implementation yet either, but that's why we are continuing to have these monthly meetings, and they are certainly not going to start up right away. We have to have time to hash through all these plans and the restart checklist to determine what actions we're going to take. We're going to be monitoring what they do. We're going to be doing very specific inspections. We're going to be publishing inspection reports, so it's not really determined in my mind

that they say they are implementing, because they're implementing portions, but I didn't see that as a concern. Did I address your question?

MS. MIRINGU: Yes. The forth item on the document, as a community member, how do I keep from hearing these things on implementing, yet I don't have the confidence that they're doing what they should have done for a very long time, so how -- how are you, as a panel, insuring that the community develop confidence?

MS. LIPA: Well, that's a good question, too, and that's part of the reasons why we're having these meetings here in this community. Other plants in the past, they had some near Chicago, some near the headquarters from here. We're trying to have most of them here because we understand it's important to the local community.

The other thing is we're going with a daytime meeting and evening meeting to try to catch whoever is interested that can't come during the day because they're working, I know, so this way they have two choices. We're trying to continue to have them ongoing. We have information available on our website. We're trying to do as much interaction with the Licensee out in the public so you can follow

along with what we're doing, but you probably won't see much submitted from the Licensee's side other than what's on our website that they have submitted as far as initial correspondence. That's all on our website, and a lot of this is stuff they're doing and stuff we're looking at, so there won't be a lot of results for you to independently check. Do you want to answer that?

MR. DEAN: Not at this point.

MS. LIPA: Eventually, we will be doing our inspection. We'll document those reports. There will be published results. There just hasn't been much yet, I understand that.

MS. MIRINGU: The other thing is to inform the public about these meetings. We need time, two weeks at least to know that a meeting is coming up, so I would ask that this panel make sure that communities have enough time from the time there meetings are announced to the time when they actually take place.

MS. LIPA: Well, and our policy is to put a meeting notice out 10 days ahead of time.

MR. DEAN: At least.

MS. LIPA: At least, and I know that for each of the meetings we have had pretty

widespread, at least through the Press, that they have been aware of our -- the dates for our next meeting. Our plan is to put on our website the date of the next meeting -- we don't have it yet, but as soon as we have that firmed up, we try to get that information out to the public.

MS. MIRINGU: Thank you.

MS. LIPA: Does anybody else have anything?

MR. HELD: My question is, what assurance do we have that after all this monkey business is gone through and you do get the thing working again, what assurance do we have that you won't do it again? That's all I have to ask.

MR. DEAN: Sir, can we -- just for the purposes of the record --

MR. HELD: Pardon me? I'm hard of hearing.

THE REPORTER: Your name?

MR. DEAN: Could you provide your name in the microphone?

MS. LIPA: Yeah, can we get you to state your name?

MR. HELD: I've got it written down.

MS. LIPA: Yeah, but just state it and spell it for us.

THE REPORTER: Just tell me your name.

MR. HELD: Pardon me?

THE REPORTER: Your name?

MR. HELD: My name?

THE REPORTER: Yes.

MR. HELD: Russ Held.

THE REPORTER: Okay.

MR. HELD: Okay?

THE REPORTER: Thank you.

MR. HELD: Thank you.

MS. LIPA: Well, and that's a good question, and I know we talked a bit today about -- the Licensee talked about they recognized the importance of putting into place corrective actions that are lasting corrective actions, and, certainly, it's our intent to really understand what the root causes were, and if we really have a good understanding of what the root causes are, then we can understand how the corrective actions match the root causes and whether that's really going to correct the problem, so that's the challenge that we have as a panel is to assess that.

THEREUPON, Mr. Jacobson conferred with Ms. Lipa.

MS. LIPA: Yeah, the other part is we do have a -- the Agency has a task force that was established in April or May, and they are doing an independent look at the Agency's activities over the years and what we have done and what we need to do, if there is anything we can learn from this condition to alter our inspection plans going forward, so that's another piece to the puzzle.

Did anybody else want to add anything?

That's a good question.

MR. DEAN: One thing I'd like to offer and -- and I think Howard was kind of hitting on this a little bit earlier in terms of, okay, there was this event, a Licensee is -- is extending a lot of effort and money and resources and trying to understand and correct the issues and so on, so forth. The NRC has reacted pretty aggressively because of the fact that you have this thing that perhaps somebody somewhere should have put together and, you know, there's a piece of the NRC regulation and a big piece, you know, of not understanding and being able to thumble through this issue before it got to where it did, and so we're spending a lot of

efforts and the Task Force is trying to help us figure what can we do better, you know, what mistakes do we as a regulator make, and so attitude and response on the part of the Agency, I think, is helpful. Okay? Mistakes may have been made, and so we have to figure out what those mistakes were and why were they made so that we can improve our processes or we can improve our training or whatever needs to be improved to assure that something like this doesn't happen again.

Now, is that a guarantee that there's not going to be an event somewhere -- somewhere else? That's not a guarantee of that, but it does -- I think it should at least provide you some confidence that we, as a regulator, and we, as the organization, is responsible for assuring public health and safety relative to operation of our power plants are trying to take an aggressive self-powerful look at ourselves so that something like this doesn't happen, so -- we can at least provide you with that insight, and I will say, you know, there are real people on this stage, okay, and are people that have dedicated their career here at the NRC to assuring public health and safety, and I can assure you that we take it as a very, very serious responsibility. I mean, Scott

Thomas, Senior Resident Inspector, who lives in the vicinity of the plant; John, down at Perry, he lives in the same area of the plant. He certainly was planning to operate safely, and that's why we have, you know, inspectors and inspection programs and why we have resident inspectors at the sites to monitor what the Licensee does on a daily basis and why we have the overall inspection program that inspects the plant operations and engineering to insure ourselves that the plant is -- that the plants are doing the things they're supposed to, to maintain public health and safety, so it would be great if we had a larger budget and more people and, you know, could watch everything that the Licensee does 24 hours a day, but we don't have the capability to do that so we have to be smart in the way we do that oversight, and that's why something like this in our efforts to try to understand why did this happen will help us do a better job of regulating the future.

MR. WHITCOMB: Howard Whitcomb, again. Miss Miringu raised an issue I would like to at least make a comment. I'm not a computer whiz, but I do hire a computer whiz. In accessing the NRC database, apparently is a science in and of itself. I am of the old guard where we used to have public

document rooms that no longer exist. Perfect example is the transcript from the June 12th meeting. I understand it's in the system, but it's almost impossible to download, okay, so access to that information, you folks make believe that us, the public have access, immediate access to that is not true, and that needs to be carried back. I have tried and I contacted the -- I guess the main PDR for the NRC in Washington. Those folks are helpful, but they're also extremely frustrated because they are having the same types of problems that the users, apparent users, are having out in the field, so I think it is important to know that the public document rooms used to have a lot more correspondence between the NRC and the Licensee, in fact, all of the docketing correspondence was maintained in the PDR. It's not accessible on the website, so there is a much more limited access to that information. I'd ask you to bring that back to your folks, see if there is some way we can somehow manage that information better.

MR. PICKETT: Howard, just make sure I understand, the transcripts should be available on our website.

MR. WHITCOMB: Yes.

MR. PICKETT: If you're trying to click on the website and download?

MR. WHITCOMB: They won't download. You can't get them to print out.

MR. PICKETT: Okay. I have read the transcript, it's 256 pages, and I can imagine it's a bear to try to download that, and this is the first I've heard that the public can't quite get to it. We made it available to the public and if you can't get to it --

MR. WHITCOMB: I understand -- I understand that that's what the frustration is. I don't know that too many -- I mean, for instance, in public -- or, in Oak Harbor we have the public library. We have a number of facilities, a number of the computer stations, but to sit down and read the document in its entirety is going too exceed all of their time limits for the users, okay, so I mean downloading it and printing it out, I think is what most reasonable people would do. They don't charge very much. It's only a nickel a copy or a page or something of that nature, so you could get it relatively cheaply, but you can't sit there and read 256 pages all at one sitting without bumping into their time limits, so what I'm saying is from a

practical standpoint while you have it on the Internet, on the website, it isn't really practical.

MR. PICKETT: You can't get it to.

MR. WHITCOMB: Right, exactly.

MR. MENDIOLA: Even if you can get to it you can't print it.

MR. WHITCOMB: Well, that's what my experience has been with that particular document, is I haven't been able to print it out.

MR. MENDIOLA: I would estimate that the one we have from this afternoon would be as long, if not longer.

MR. WHITCOMB: Probably longer.

MR. MENDIOLA: And probably just as difficult to print it. We'll take a look at that and see if we can do anything with it, but we're limited by the technology that we have and we're victims of the same technology. Maybe we can make it in smaller files.

MR. WHITCOMB: Well, I don't know. Is it the ADAMS system, is that what the acronym is?

MR. MENDIOLA: Yes.

MR. WHITCOMB: It ain't working?

MR. MENDIOLA: Well, I'm sorry, you're talking about the ADAMS system?

MR. WHITCOMB: I'm saying the ADAMS system generally, is that the system that you maintain all of your documentation --

MR. MENDIOLA: Right, ADAMS is our document system, but the transcript I'm told is only on the website right now.

MR. WHITCOMB: Right. Now, I understand, but that's two separate issues, but, I mean, the other is just trying to access just the regular documentation that normally is communicated between the site and the NRC which is open to the public, I'm not talking about any proprietary information. I'm talking about correspondence that typically would be open and available as part of the Licensee.

MR. DEAN: Yeah, I would offer in that regard, Howard, first of all, interact with the public document room is good and hopefully, they can direct you if you're having some issues. I would think on ADAMS, if you were to search on ADAMS for, you know, Davis-Besse you ought to be able to get a list of documents that have Davis-Besse title, which would at least give you a start. I mean, I'm not very good at ADAM searches either.

MR. WHITCOMB: Well, unfortunately,

you have to use docketing numbers, which most of the public doesn't have --

MR. DEAN: This gentleman behind you was -- did you have another -- you were frustrated the same way?

MR. YOUNG: The PDF file, whatever it means, versus the text file if you can deliver it in TXT you might have efficiency base server as well.

MR. DEAN: Okay.

MR. YOUNG: And that's primitive enough to handle just about any computer out there.

MR. DEAN: Okay. Anybody else like to offer a comment or observation or question or issue?

MR. YOUNG: My name is Richard Young. Everybody knows what happened also in 1992 where they had a study of manpower levels at the station conducted by Tim Martin. They reduced the manpower significantly, and I didn't see many changes improving that many advantages where the same level of efficiency and much detail being maintained, so my question is on the root cause the staffing versus workload considered as a major factor in increasing the likelihood of making inappropriate choices,

decisions or actions such as multiple simultaneity improprieties, that kind of thing. Are they too busy between '92 and now, it may have been a factor. I don't know if they have identified that one or not.

MR. DEAN: We're doing that as management and human performance and organizational --

MR. YOUNG: It's too early to ask, but I thought it might be a prompt.

MR. DEAN: I mean, certainly that's a potential factor --

MR. YOUNG: About the study.

MR. DEAN: -- that we would look for when the Licensee completes their root cause. They haven't got to that level of detail, I think, but that's something --

MR. YOUNG: I'll be watching.

MR. DEAN: Keep your eyes open.

MR. YOUNG: Thank you very much.

MR. DEAN: Yes, ma'am? I saw you edging up. There you go.

MS. KOCHER: Yes, I'm Cheryl Kocher. I'm from Port Clinton, and I was here two meetings ago, and I questioned you about the particles that were taken on the workers because the

monitors weren't working correctly at Davis-Besse, and I -- I'm asking this because I'm a health professional, and I work -- I'm a dental hygienist, and I have a degree to teach dental hygiene also, and I'm questioning a change in a lot of my patients' thyroid medication in the last couple of years. Probably 10 to 20% per day when I'm doing med history -- I have to take medical histories of their medicines and see if they have changed, you know, before we can work, and so I'm very interested in this, and what I was questioning is, when I came to you, I was wondering why no one has checked to see if other workers that were also working in that same containment area were notified that these particles could have gone to their homes? I don't understand why someone, and I assume -- I don't know -- I went to you once. I don't know who is the governing body that should be following this up because no one knows if there were 400 particles walked out the door, we don't know, and there are people in this community that very well could have taken them into their homes.

Someone and not Davis-Besse -- I don't want First Energy to be monitoring this, but I don't know who it is that would go in and check this, and I

don't know if it's you.

MR. DEAN: Okay. Let me -- actually, I'm going to ask you, Christine, or, Scott, maybe to address the issue about monitoring. My understanding is that after some of these issues came to light, the Licensee went back and evaluated a number of people that had the potential to be exposed, to check, you know, their occupational of the age of the exposure on the order of 40 or 50 people.

MS. KOCHER: Well, interesting, because I have a 20 year old patient that came in and he's now working at a marina, and I asked him where do you work -- he said, well, I'm working at a marina now.

I used to work at Davis-Besse, and I got laid off and now I'm working here, and so I was questioning this way they check you in and out, and he explained there were two times that they supposedly checked you, and they would brush it off, and then they could leave, is this correct? This is what he said to me, flick it off --

MR. DEAN: No.

MS. KOCHER: I didn't understand what he meant, but maybe it never happened, I don't

know, but, anyway, point being, he never was -- I said, well, did you realize -- and he was working there when this all happened, and I said did you realize -- I mean when the workers went in, I said, did you ever realize that the monitors weren't working, and he goes, what? And I said has anyone contacted you that -- you know, there were particles that were taken out that people didn't know about, and he didn't know -- and this is another point that is real big to me. You wonder why people aren't here from our community, we don't get much information, and looking back through -- thank goodness we have the website to go to, and for local people, Howard, I don't know if this is for you, to go to Googles.com and type in Davis-Besse, and you can get The New York Times articles, you can get The Wall Street Journal articles, you can get pictures. I mean, there's a lot there, but our local television stations and newspapers, the headlines sometimes, you know, for something this big that happened in our community, to me, it should have been this big (indicating) in our newspaper, and it was usually like down here and the principal was up here, which was a big thing to us, but this is huge. This was a huge thing, and that's why -- don't judge what's going on. Remember,

there's a lot of people that when we talk about this out in the open, I mean, just in someone's home, they just don't know to be here, and then they get -- I mean, they would be concerned, so we have to rely on you. You're our only link. First Energy isn't here, and if OSHA would come into our dental office and see that our autoplate wasn't working, but we could say to them, well, you know, in two months we're going on vacation, so if it's okay, can we fix it then? You know, they'd close us up in a second, and none of you that get work done would, I mean, you'd be really upset if you ever found out that a Government agency could be pushed. You should be doing your job. That's why you're here, and if you have to tell them they are doing something wrong, please do it. This is all we're asking. Thank you.

THEREUPON, there was an applause by the audience.

MR. DEAN: Let me just take the opportunity, though, to share with you -- you can go ahead and sit down. Yesterday I went through the containment with Scott and John, walked through the containment, looked at the damage to the reactor vessel head and looking at what they are doing

relative to trying to identify some of the things in the containment and just trying to get a good sense of, you know, what did it look like, what were they doing, what do they still have left to do, so on, so forth, and I just want to spend like maybe two or three minutes describing the process that I had to go through relative to radiation protection. Okay?

The first thing I had to do was I had to go to an administrative building and get what's called a whole body -- you stand inside this monitoring device and basically what they are trying to get a sense of -- well, before you even go into the plant what is your base line, you know, radioactive composition basically in your body, so I did that, and then to get into the particle plant where you do have radiation protection, first of all, I had to dress out in bleak anti-contamination clothing, so -- it's a full yellow suit with booties on both shoes, two sets of gloves, rubber boots on each foot, and that was just to walk through the general containment.

MR. THOMAS: Bill, you forgot the --

MR. DEAN: That's right, Scott. Thank you. I had to stop and get two forms of dosimeter. I had to get a dosimeter that you put

into a machine to ascertain how much radiation you were exposed to, but also one that reads out continuously so I can monitor the whole time I'm in there whether I'm getting any undue exposure, okay, so -- so that's the part going into the plant -- yeah, that's the part going into the plant. So now I'm in the plant. I'm almost out. I've got my dosimeter and we're walking around. We spent about an hour walking around the containment, going up and down ladders, looking at all sorts of things inside the containment, so now, I have to come out of containment. Well, they have this huge control point and they have all these drums of where you take off all the clothing, special clothing that you put on, you put the gloves and booties in here and your hood and overalls in here, and then you step out and then you monitor yourself, go on these special monitors where they read your -- you know, do you have any contamination on your body now that you've taken all this clothing off, and you have to go through several sets of that before you even exit the building, so I was monitored two or three times before I even was allowed to leave that area of the plant where I could go back on the clean side, so to speak, so --

MS. KOCHER: But if it showed up

on a worker's clothing in South Carolina, but, you know, I'm just -- what I was wondering was who was -- I was going to check who is going to check this, I mean, is this your job to go back --

MR. DEAN: Well, one of the issues we had with the Licensee when this issue came to light the fact that somehow these minute particles got off site, okay, and what happens was they were monitoring like I described my monitoring, they found that they had contamination. They took all of their clothes off, okay?

MS. LIPA: Most of them.

MR. DEAN: Most of them, and then they marched them over to the building where they got the whole body count and they tried to assess did they have intake 'cause their concern was did I breath in something, did I ingest something, and, if so, you know, they could do some things to flush it out, so on, so forth, and so that's the process that they went through, and, I think, if I'm not mistaken, the Licensee might have made in this regard was that they assumed the individuals had internal acquisition; is that right?

MS. LIPA: Right, so it masked.

MR. DEAN: So it masked the fact

that they might have had some small minute particles on their shoes or something, so that's kind of how these few particles got off site.

MS. KOCHER: But how do you know how few?

MR. DEAN: Well, you have to go back and do an assessment, and this is been part of what the challenge is, you know, when these things were finally discovered, they were finally discovered when these individuals went to work at another plant and they went through the same process I described, and they found, hey, you have contamination, and that's when the word got back to the Licensee and that's where we had some challenges in trying to convince Davis-Besse that this might have been their issue, and so, but when you take a look at what was remaining -- so this was like a month later, what was the composition of these particles, what was the intensity of them, and then you can make some judgment working backwards as to what actually was -- escaped the plant and our assessment to this point was, we haven't completed our analysis, but our assessment to this point was that very, very small levels, levels to the degree that even if all of the material was -- if somebody, for example, laid in the

bed that this one guy laid in and breathed in all the material that it would be extremely minimal exposure, well below -- I think below the limits, so -- but there's a challenge of doing that analysis and that's kind of what we're trying to work with the region in trying to find out how bad could that have been knowing all that. Okay?

MR. THOMAS: If you have another question, please ask it.

MR. DEAN: Yeah, please don't hesitate to ask a question if you have one.

MR. THOMAS: If I could add just one thing, I believe one of your questions was, how can we determine the number of people that may have -- well, as part of the inspection, it appears that due to the type of contamination they can isolate it to a specific activity, and, based on that, they can narrow who they followed up on, so I don't know if that helps at all.

MS. LIPA: Yeah, let me just add a couple things, because I think I spoke with you in May, Cheryl, and at that time I told you that I had been in containment before this whole thing was identified, and based on my understanding of the problem, it's kind of like the people past -- they

went to monitor No. 1, and monitor No. 1 said there maybe was a problem, so then they went to monitor No. 2, and monitor No. 2 was where the issue was where it wasn't working properly, but everybody who got through monitor No. 1 said you were clean, you were clean, so I knew I had been through monitor 1 and I was clean, so the issue is more with these people who had potentially internally something in their nose, like Scott said, they were able to tell from the characterization of the particles, it was people working on this particular job, so I'm pretty sure when they went back and pieced it altogether, they figured out what was the potential scope of people affected, but I think, based on my understanding I'm not concerned that everybody who passed through monitor No. 1 is a potential particle carrier. It's more the people who set off monitor No. 1 and how thoroughly were they assessed when they went over and had this more extensive assessment. I don't know if that helps?

MS. KOCHER: I'm just saying that most of the workers walked through the monitor --

MS. LIPA: You had to go through monitor -- even back then, you had to go through monitor No. 1, everybody does. If you set off

monitor No. 1, set off that alarm, they would send you somewhere else, and there's a small number of people that fell into that category.

MR. DEAN: Okay. And, Cheryl, if you're interested in chatting some more when we're done here, we'll be more than happy.

Is there anybody else that would like to chat with us?

MR. LODGE: Terry Lodge, again.

I have a question that the Union of Concerned Scientist's letter, dated the 15th of July, I don't know if you've seen it, mentions the possibility of microbes and the fact that water has penetrated the bifold barrier. I'm curious to know if the ground water is going to be the ground water in the vicinity of containment is monitored for the presence of radiation, and, if not, is it going to be, and I'd also like to know what -- what can be done about the seepage problem? As I understand it, it is -- it is a rather endemic problem when you have concrete types of porous materials and that it isn't necessarily going to be easily resolved. It is something that is rather widespread in the industry, a cracked reactor agent.

MR. DEAN: Let me take a shot

first at the issue of the hyperorganism induced corrosion --

MR. LODGE: Correct.

MR. DEAN: Okay, and this issue was raised with the Licensee today in the meeting and they assured us that they have -- they are testing and evaluating the ground water that does exist around the containment for that particular issue, so we'll wait and see what their test show, and on the second issue, I guess is more of a generic issue of ground water. I guess, first of all, I think most sights, if not all have smaller wells that are dug, the various parts so they can sample the ground water surrounding the plant, ascertain it if there is some radiation if that's perhaps being leached in the ground water, and that's true of all the plants.

MR. THOMAS: That's true.

MR. DEAN: So that -- relative to your question about radioactive to ground water, that's something that has to be monitored through the Licensee and probably by the monitoring program.

Relative to the issue of ground water and impact on concrete basemats, things like that, I guess I'm not -- I'm not knowledgeable too much about that other than the fact that I was involved at

Millstone several years ago when they had that question about basemat, and my understanding was that issue was -- was resolved to the satisfaction of our technical staff, though, it did -- it was a difficult question to answer.

MR. LODGE: How was it resolved at Millstone?

MR. DEAN: I can't remember. I think the Licensee, you know, they had to provide us some information regarding, for example, concentration of the aggregate or whatever was in the concrete in the basemat, and, you know, take samples of the surrounding area and provide us some engineering analysis relative to, you know, what did that mean in terms of percent degradation on the basis of capacity and certain level of degradation, being able to stand -- etc., etc., but, other than that, I mean, I'm just -- that's -- you've plumbed the depth of my knowledge on this one.

MS. LIPA: I did have a question for you, though. Earlier, and I meant to ask this then, you raised a couple of questions, I don't know if we answered all of them, but one of them you referred to was, you said something to the effect that the Utility or, you know, NRC, I'm not sure

which, had been deferring maintenance or cancelling inspections -- can you repeat that question or that statement?

MR. LODGE: I don't know if I can repeat the statement. What I was talking about was, as I understand it, as early as the 1990's, the Utility was talking about removing the installation and did not for cost reasons and was also going to cut larger view holes in that structure.

MS. LIPA: Right.

MR. LODGE: And did not.

MS. LIPA: Okay. Yeah, those are the modifications, and you're right, we got into that on the AIT inspection on April 5th where they were -- Scott showed you the small mouse holes, five by seven and three by five --

MR. LODGE: Right.

MS. LIPA: -- and the Licensee had it on the books to cut larger openings and do a more thorough inspection and more thorough cleaning, and that mod had been deferred, but that was the Licensee's decision. It was their own internal process. It had nothing to do with NRC, and I didn't know if your question was talking about NRC or the Licensee.

MR. LODGE: But if the Utility indicates the Agency is going to do something like that --

MS. LIPA: But they --

MR. LODGE: -- and then does not --

MS. LIPA: But they didn't even -- but we weren't part of that process. It was an initiative that they were considering, and they had some basis for doing it and apparently through the mod review, they decided not to do it and that's one of our issues, you know, if you seen the AIT report which is published, we call that missed opportunities in there and why that mod was deferred.

MR. LODGE: Okay, thank you.

MS. LIPA: Thank you.

MR. DEAN: Anybody else?

What time does the fair close down?

(Laughter).

Okay. If there's nobody else, the panel members will certainly loiter in the area. If anybody has any particular questions that they'd like to ask anybody personally.

We appreciate you coming out tonight and sharing your time with us. Hopefully we're able to

provide some information to you and give you a sense of our dedication and desire to assure you have confidence in the regulatory. Thank you very much.

THEREUPON, the hearing was adjourned.

CERTIFICATE

STATE OF OHIO )
) ss.
COUNTY OF HURON )

I, Marlene S. Rogers-Lewis, Stenotype Reporter and Notary Public, within and for the State aforesaid, duly commissioned and qualified, do hereby certify that the foregoing, consisting of 63 pages, was taken by me in stenotype and was reduced to writing by me by means of Computer-Aided Transcription; that the foregoing is a true and complete transcript of the proceedings held in that room on the 16th day of July, 2002 before the U.S. Nuclear Regulatory Commission.

I also further certify that I was present in the room during all of the proceedings.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of office at Wakeman, Ohio this day of , 2002.

Marlene S. Rogers-Lewis
Notary Public
3922 Court Road
Wakeman, OH 44889

My commission expires 4/29/04