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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

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

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

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

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

21 (To Mr. Stucker) thank you very much.

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

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

10 MR. JACOBSON: Mechanical.

11 MR. DEAN: -- Mechanical

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

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

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

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

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

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

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

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

1           Relative to their efforts regarding Reactor  
2           Head Resolution, the Midland head that they have  
3           purchased to install on the Davis-Besse reactor  
4           vessel has essentially completed their inspection.  
5           They've cleaned it, and they consider it ready to be  
6           moved and prepare for installment down here, so  
7           they've spent with us this year, I think, about  
8           30,000 man-hours of effort looking at that reactor  
9           vessel head, assuring that it was of appropriate  
10          quality to be able to be installed at the Davis-Besse  
11          plant, and they believe they have completed all of  
12          their activities relative to assuring that that  
13          vessel head can be -- can be installed.

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

7 MS. LIPA: The containment  
8 structure?

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

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

25 MR. DEAN: (Indicating).

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

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

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

11          MR. PICKETT:     Four feet.

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

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

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

18          UNIDENTIFIED:    On this, they are?

19          MR. THOMAS:     Yes. Well, on the  
20      outside of the containment in the annulus area, yes,  
21      as well as on the inside, but those are ongoing.  
22      They're being conducted by the Licensee. Okay?

23      This is a picture of the top of the reactor head, and  
24      that's what all the fuss is about. This is the area  
25      where the cavity is. These are -- these are the



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

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

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

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

7 MR. DEAN: Thank you, Scott.  
8 Our intent there was to try and give  
9 everybody kind of a quick basic understanding of, you  
10 know, what's transpired here, and, hopefully, be able  
11 to allow you to formulate or contextualize any other  
12 questions or concerns or issues that you might have.

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

16 MR. ARNDT: (Indicating).

17 MR. DEAN: Yes, sir?

18 MR. ARNDT: Steve Arndt, Ottawa  
19 County Commissioner.

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

23 MR. ARNDT: (Nod indicating no).

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

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

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

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

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

24 MR. PICKETT: What page is that,  
25 Howard?

1 MR. WHITCOMB: 38.

2 MS. LIPA: 37 -- 38, okay.

3 MR. WHITCOMB: I think the

4 "Questioning attitude is not evident in decision

5 making process" I think that's pretty

6 self-explanatory.

7 The second that they identify is a "Lack of

8 management oversight has resulted in lax rigor in

9 process implementation." I'm not so sure that I

10 fully understand that item completely.

11 The third is "Standards have existed for many

12 years that lacked rigor in problem solving." I'm

13 not sure that I completely understand that one as

14 well, but the one that I have the most difficulty

15 understanding is that the fourth one, "Strong

16 management, slash, leadership tends to improve

17 performance, teamwork and ownership." Now, I would

18 ask this panel, could you offer an explanation as to

19 what that means to you, and I understand that,

20 perhaps, you've only first heard that this afternoon,

21 but you've had the benefit at least of the evening

22 hour to look those materials over, and I'd like to

23 have some sort of response to that if I may.

24 MR. DEAN: I had a similar

25 reaction, Howard, when I saw that slide, and I think

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

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

24 MR. DEAN: Scott, do you have  
25 anything?

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

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

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

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

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

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

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

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

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



1 you.

2 MR. DEAN: Thank you, Howard.

3 MR. LODGE: My name is Terry

4 Lodge, L-O-D-G-E.

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

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

1 emanating from their reactor.

2 I've reviewed and listened to the, what I

3 take to be the work plan, the checklist, the punch

4 list, that the NRC is following at this point, and I

5 think it's rather superficial. It's -- it seems

6 basically aimed at insuring that there's good

7 engineering, but that many unanswered questions

8 appear at this point as overseen by this panel

9 destined to remain unanswered. The UCS has inquired

10 of the NRC about the status of a couple of

11 motor-operated valves that the bolts to which appear

12 to have been corroded away, perhaps probably by the

13 boric acid vapor exposure, the long-term exposure

14 within the containment. I know that there are miles

15 of cable, that there are numerous electrical

16 appliances, motors, devices, switches, all kinds of

17 things inside the containment building. Your focus

18 as regulators seem simply to be narrowly fixed on

19 making sure that if the Utility wants to put a new

20 head on that they do a good job. I am concerned as

21 the UCS is concerned, as the 14 -- 14 groups that

22 join the Union of Concerned Scientist in the petition

23 are concerned about the rest of the story, the other

24 things in the containment structure, prolonged

25 exposure to boric acid which is established certainly

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

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

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

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

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

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

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

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

13          MR. MENDIOLA:    (Nod indicating yes).

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

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

22          MR. LODGE:        All or some.

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

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

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

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

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

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

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

1 MR. LODGE: Okay.

2 MR. DEAN: -- there were a number

3 of what do you want to call it, connect the dots that

4 the Licensee just didn't put together, and I think

5 those things that you -- that Howard went off

6 relative to attitude, lack of standards, so on, so

7 forth all contribute to why is it that the Licensee

8 didn't pull all of that information together, and as

9 I mentioned at the outset when we talked about this

10 afternoon meeting, the area we're most interested in

11 as a regulator is the why? Why did we not have the

12 capacity to connect all those dots, and what does

13 that say about the culture that existed at this

14 plant, and what are you going to do about it to make

15 sure that that culture is not -- you know, is not

16 existent.

17 MR. LODGE: And what is the

18 Utility telling you about the culture that existed

19 and what are they intending to do about it?

20 MR. DEAN: Well, you heard Howard

21 read off what their initial insights are causes of

22 evaluation. As I mentioned at the beginning of the

23 meeting that there is a cause team looking at, if you

24 want to call it, the soft side management,

25 performance issues that are associated with this.



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

10 MR. LODGE: Thank you.

11 MS. MIRINGU: Good evening.

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

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

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

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

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

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

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

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

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

9 MR. DEAN: Not at this point.

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

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

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

23 MR. DEAN: At least.

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

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

7           MS. MIRINGU:       Thank you.

8           MS. LIPA:           Does anybody else have  
9       anything?

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

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

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

19          THE REPORTER:       Your name?

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

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

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

1 MS. LIPA: Yeah, but just state  
2 it and spell it for us.  
3 THE REPORTER: Just tell me your  
4 name.  
5 MR. HELD: Pardon me?  
6 THE REPORTER: Your name?  
7 MR. HELD: My name?  
8 THE REPORTER: Yes.  
9 MR. HELD: Russ Held.  
10 THE REPORTER: Okay.  
11 MR. HELD: Okay?  
12 THE REPORTER: Thank you.  
13 MR. HELD: Thank you.  
14 MS. LIPA: Well, and that's a  
15 good question, and I know we talked a bit today  
16 about -- the Licensee talked about they recognized  
17 the importance of putting into place corrective  
18 actions that are lasting corrective actions, and,  
19 certainly, it's our intent to really understand what  
20 the root causes were, and if we really have a good  
21 understanding of what the root causes are, then we  
22 can understand how the corrective actions match the  
23 root causes and whether that's really going to  
24 correct the problem, so that's the challenge that we  
25 have as a panel is to assess that.

1           THEREUPON, Mr. Jacobson conferred with Ms.  
2 Lipa.

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

11           Did anybody else want to add anything?

12           That's a good question.

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

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

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



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

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

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

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

25 MR. WHITCOMB: Yes.

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

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

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

11 MR. WHITCOMB: I understand -- I  
12 understand that that's what the frustration is. I  
13 don't know that too many -- I mean, for instance, in  
14 public -- or, in Oak Harbor we have the public  
15 library. We have a number of facilities, a number of  
16 the computer stations, but to sit down and read the  
17 document in its entirety is going to exceed all of  
18 their time limits for the users, okay, so I mean  
19 downloading it and printing it out, I think is what  
20 most reasonable people would do. They don't charge  
21 very much. It's only a nickel a copy or a page or  
22 something of that nature, so you could get it  
23 relatively cheaply, but you can't sit there and read  
24 256 pages all at one sitting without bumping into  
25 their time limits, so what I'm saying is from a

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

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

4 MR. WHITCOMB: Right, exactly.

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

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

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

13 MR. WHITCOMB: Probably longer.

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

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

22 MR. MENDIOLA: Yes.

23 MR. WHITCOMB: It ain't working?

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

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

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

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

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

25 MR. WHITCOMB: Well, unfortunately,

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

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

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

10 MR. DEAN: Okay.

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

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

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

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

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

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

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

12 MR. YOUNG: About the study.

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

17 MR. YOUNG: I'll be watching.

18 MR. DEAN: Keep your eyes open.

19 MR. YOUNG: Thank you very much.

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

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

1 monitors weren't working correctly at Davis-Besse,  
2 and I -- I'm asking this because I'm a health  
3 professional, and I work -- I'm a dental hygienist,  
4 and I have a degree to teach dental hygiene also, and  
5 I'm questioning a change in a lot of my patients'  
6 thyroid medication in the last couple of years.  
7 Probably 10 to 20% per day when I'm doing med  
8 history -- I have to take medical histories of their  
9 medicines and see if they have changed, you know,  
10 before we can work, and so I'm very interested in  
11 this, and what I was questioning is, when I came to  
12 you, I was wondering why no one has checked to see if  
13 other workers that were also working in that same  
14 containment area were notified that these particles  
15 could have gone to their homes? I don't understand  
16 why someone, and I assume -- I don't know -- I went  
17 to you once. I don't know who is the governing body  
18 that should be following this up because no one knows  
19 if there were 400 particles walked out the door, we  
20 don't know, and there are people in this community  
21 that very well could have taken them into their  
22 homes.  
23         Someone and not Davis-Besse -- I don't want  
24 First Energy to be monitoring this, but I don't know  
25 who it is that would go in and check this, and I



1 don't know if it's you.

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

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

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

23 MR. DEAN: No.

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

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

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

18 THEREUPON, there was an applause by the  
19 audience.

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

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

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

21 MR. THOMAS: Bill, you forgot  
22 the --

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

1 into a machine to ascertain how much radiation you  
2 were exposed to, but also one that reads out  
3 continuously so I can monitor the whole time I'm in  
4 there whether I'm getting any undue exposure, okay,  
5 so -- so that's the part going into the plant --  
6 yeah, that's the part going into the plant. So now  
7 I'm in the plant. I'm almost out. I've got my  
8 dosimeter and we're walking around. We spent about  
9 an hour walking around the containment, going up and  
10 down ladders, looking at all sorts of things inside  
11 the containment, so now, I have to come out of  
12 containment. Well, they have this huge control point  
13 and they have all these drums of where you take off  
14 all the clothing, special clothing that you put on,  
15 you put the gloves and booties in here and your hood  
16 and overalls in here, and then you step out and then  
17 you monitor yourself, go on these special monitors  
18 where they read your -- you know, do you have any  
19 contamination on your body now that you've taken all  
20 this clothing off, and you have to go through several  
21 sets of that before you even exit the building, so I  
22 was monitored two or three times before I even was  
23 allowed to leave that area of the plant where I could  
24 go back on the clean side, so to speak, so --  
25 MS. KOCHER: But if it showed up

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

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

12 MS. LIPA: Most of them.

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

24 MS. LIPA: Right, so it masked.

25 MR. DEAN: So it masked the fact

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

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

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

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

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

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

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

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



1 went to monitor No. 1, and monitor No. 1 said there  
2 maybe was a problem, so then they went to monitor No.  
3 2, and monitor No. 2 was where the issue was where it  
4 wasn't working properly, but everybody who got  
5 through monitor No. 1 said you were clean, you were  
6 clean, so I knew I had been through monitor 1 and I  
7 was clean, so the issue is more with these people who  
8 had potentially internally something in their nose,  
9 like Scott said, they were able to tell from the  
10 characterization of the particles, it was people  
11 working on this particular job, so I'm pretty sure  
12 when they went back and pieced it altogether, they  
13 figured out what was the potential scope of people  
14 affected, but I think, based on my understanding I'm  
15 not concerned that everybody who passed through  
16 monitor No. 1 is a potential particle carrier. It's  
17 more the people who set off monitor No. 1 and how  
18 thoroughly were they assessed when they went over and  
19 had this more extensive assessment. I don't know if  
20 that helps?

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

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

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

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

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

9 MR. LODGE: Terry Lodge, again.

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

25 MR. DEAN: Let me take a shot

1 first at the issue of the hyperorganism induced  
2 corrosion --

3 MR. LODGE: Correct.

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

17 MR. THOMAS: That's true.

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

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

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

6 MR. LODGE: How was it resolved  
7 at Millstone?

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

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

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

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

10 MS. LIPA: Right.

11 MR. LODGE: And did not.

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

17 MR. LODGE: Right.

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

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

4 MS. LIPA: But they --

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

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

15 MR. LODGE: Okay, thank you.

16 MS. LIPA: Thank you.

17 MR. DEAN: Anybody else?

18 What time does the fair close down?

19 (Laughter).

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

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

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

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7 THEREUPON, the hearing was adjourned.

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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