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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.

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 volatility 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 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