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 RE Palisades Nuclear Plant

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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10 CFR 2.206 PETITION REVIEW BOARD (PRB)

CONFERENCE CALL

RE

PALISADES NUCLEAR PLANT

+ + + + +

TUESDAY

APRIL 8, 2014

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The conference call was held, Louise Lund,
Chairperson of the Petition Review Board, presiding.

PETITIONER: MICHAEL MULLIGAN

PETITION REVIEW BOARD MEMBERS

LOUISE LUND, Chair, Deputy Division Director

Division of Reactor Licensing, NRR

DAVID ALLEY, Senior Materials Engineer,

Division of Engineering

REED ANZALONE, General Engineer, Nuclear

Performance & Code Review Branch

LEE BANIC, Petition Coordinator, NRR

BOB CARLSON, Branch Chief, Division of

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Operating Reactor Licensing

MAC CHAWLA, Petition Manager for 2.206

Petition

GANESH CHERUVENKI, Materials Engineer,

Division of Engineering

RUSS HASKELL, Operating Experience Branch,

NRR

JOSHUA KAIZER, Reactor Systems Engineer, NRR

WARREN LYON, Senior Reactor Systems Engineer,

Reactor Systems Branch

BOB WOLFGANG, Senior Mechanical Engineer,

Division of Engineering

NRC HEADQUARTERS STAFF

JEREMY DEAN, Branch Chief, Nuclear Performance

& Code Review Branch

LINDSAY ROBINSON, Project Manager, Division of

License Renewal

SHELDON STUCHELL, Branch Chief, Generic

Communications

REGION III STAFF

BRENT BOSTON, Reactor Engineer, Division of

Reactor Projects

ERIC DUNCAN, Branch Chief, Reactor Projects

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Branch 3

ALEX GARMOE, Senior Resident Inspector

JAY LENNARTZ, Project Engineer, Division of

Reactor Projects

LICENSEE STAFF

BARBARA DOTSON

LINDSAY ROSE

P R O C E E D I N G S

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11:00

a.m.

MR. CHAWLA: Okay, all right. I'd like to thank everybody for attending this meeting. My name is Mac Chawla, and I'm the Project Manager for the Palisades Nuclear Plant. We are here to allow the petitioner, Mike Mulligan, to address the Petition Review Board regarding the 2.206 petition dated March 5, 2014.

I'm also the petition manager for the petition. The Petition Review Board Chairman is Louise Lund. As part of the Petition Review Board's, or PRB's, review of this petition, Mike Mulligan has requested this opportunity to address the PRB.

This meeting is scheduled from 11 a.m. to 12 p.m. Eastern time. The meeting is being recorded by the NRC Operations Center and will be transcribed by a court reporter. The transcripts will become a supplement to this petition. The transcript will also be made publicly available.

I would like to open this meeting with introductions. As we go around the room, please be sure to clearly state your name, your position, and the office that you work for within the NRC for the record.

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1 I'll start off. My name again is Mac
2 Chawla. I'm the petition manager. I'll go around the
3 table here.

4 CHAIR LUND: I'm Louise Lund. I'm the
5 deputy division director for the Division of Operating
6 Reactor Licensing in the Office of Nuclear Reactor
7 Regulation.

8 MR. WOLFGANG: Bob Wolfgang. I'm a senior
9 mechanical engineer in the Division of Engineering.

10 MR. LYON: Warren Lyon, senior reactor
11 systems engineer with the Reactor Systems Branch.
12 Hello, Mike. I grew up in Peterborough. I just wanted
13 to say hello to a fellow person from New Hampshire.

14 MR. MULLIGAN: The snow is all gone
15 finally.

16 MS. BANIC: Lee Banic, petition
17 coordinator, Office of Nuclear Reactor Regulation.

18 MR. HASKELL: Russ Haskell with the Office
19 of Nuclear Reactor Regulation in the Operating
20 Experience Branch.

21 MR. ALLEY: Dave Alley, senior materials
22 engineer, Division of Engineering.

23 MR. CHERUVENKI: Ganesh Cheruvenki,
24 materials engineer, Division of Engineering.

25 MR. KAIZER: Joshua Kaizer, reactor

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1 systems engineer, Nuclear Regulation, NRR.

2 MR. CARLSON: Bob Carlson, branch chief,
3 Division of Operating Reactor Licensing.

4 MR. ANZALONE: Reed Anzalone, general
5 engineer, Nuclear Performance and Code Review Branch,
6 Division of Safety.

7 MS. ROBINSON: Lindsay Robinson, Division
8 of License Renewal, project manager.

9 MR. CHAWLA: Okay. We have completed the
10 introductions at the NRC Headquarters. At this time,
11 are there any other people from Headquarters on the
12 phone?

13 (No response.)

14 MR. CHAWLA: Hearing none, are there any
15 NRC participants from regional office on the phone?

16 MR. DUNCAN: Yes, Mac. This is Eric
17 Duncan. I'm the branch chief for Palisades here at
18 Region 3, and there's a couple of others here, as well.
19 They'll introduce themselves.

20 MR. LENNARTZ: This is Jay Lennartz. I'm
21 the project engineer for Palisades.

22 MR. BOSTON: Good morning. This is Brent
23 Boston. I'm a reactor engineer in DRP here at Region
24 3.

25 MR. DUNCAN: That's it, Mac.

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1 MR. CHAWLA: Is there any representatives
2 for the licensee on the phone? Please introduce
3 yourself.

4 MS. DOTSON: Barb Dotson, Regulatory
5 Assurance.

6 MS. ROSE: Lindsay Rose, communications
7 specialist.

8 MR. CHAWLA: We do have a couple more folks
9 from Headquarters who have joined. Please introduce
10 yourself.

11 MR. STUCHELL: Sheldon Stuchell, branch
12 chief, Generic Communications.

13 MR. DEAN: Jeremy Dean, branch chief,
14 Nuclear Performance and Codes.

15 MR. CHAWLA: Mr. Mulligan, would you
16 please introduce yourself for the record?

17 MR. MULLIGAN: Hi. I'm Mike Mulligan and
18 -- I'm sorry?

19 MR. DUNCAN: Sorry, Mike. We need to get
20 the residents, as well, and anybody else --

21 MR. CHAWLA: Sorry. I thought you said
22 everybody was . . .

23 MR. GARMOE: Yes, Mac, it's Alex Garmoe,
24 NRC, senior resident inspector.

25 MR. CHAWLA: Okay. Then that's everybody

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1 from NRC. So back to Mr. Mulligan. Mr. Mulligan,
2 would you please introduce yourself for the record?

3 MR. MULLIGAN: I'm Mike Mulligan. I was
4 on a fast-attack submarine many years ago as a nuke. It
5 was an experimental sub anyways. I worked at Vermont
6 Yankee for a number of years. I was, for a number of
7 years, I was a reactor operator at the plant. And now
8 I'm, more or less, a general whistleblower. Thank you.

9 MR. CHAWLA: It is not required for members
10 of the public to introduce themselves on the call.
11 However, if there are any members of the public on the
12 phone that wish to do so at this time, please state your
13 name for the record. Any members of the public?

14 (No response.)

15 MR. CHAWLA: Okay. Hearing none, I would
16 like to emphasize that we each need to speak clearly and
17 loudly to make sure that the court reporter can
18 accurately transcribe this meeting. If you do have
19 something that you would like to say, please first state
20 your name for the record.

21 All those dialing into the meeting, please
22 remember to mute your phone to minimize any background
23 noise or distraction. If you do not have a mute button,
24 this can be done by pressing the keys *6. To unmute,
25 press *6 keys again. Thank you.

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1 At this time, I will turn it over to the PRB
2 Chairman, Louise Lund.

3 CHAIR LUND: Good morning. Welcome to
4 this meeting regarding the 2.206 petition submitted by
5 Mr. Mulligan. I'd like to first share some background
6 on our process.

7 Section 2.206 of Title 10 of the Code of
8 Federal Regulations describes the petition process, the
9 primary mechanism for the public to request enforcement
10 action by the NRC in a public process.

11 This process permits anyone to petition NRC
12 to take enforcement-type action related to NRC
13 licensees or licensed activities. Depending on the
14 results of its evaluation, NRC could modify, suspend,
15 or revoke an NRC-issued license or take any other
16 appropriate enforcement action to resolve the problem.
17 The NRC staff's guidance for the disposition of 2.206
18 petition requests is in Management Directive 8.11,
19 which is publicly available.

20 The purpose of today's meeting is to give
21 the petitioner, Mr. Mulligan, an opportunity to provide
22 any additional explanation or support for the petition
23 before the Petition Review Board's initial
24 consideration and recommendation. This meeting is not
25 a hearing, nor is it an opportunity for the petitioner

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1 to question or examine the PRB on the merits or the
2 issues presented in the petition request. No decisions
3 regarding the merits of this petition will be made at
4 this meeting.

5 Following this meeting, the Petition
6 Review Board will conduct its internal deliberations.
7 The outcome of this internal meeting will be discussed
8 with the petitioner.

9 The Petition Review Board typically
10 consists of a chairman, usually a manager at the Senior
11 Executive Service level at the NRC. It has a petition
12 manager and a PRB coordinator. Other members of the
13 Board are determined by the NRC staff based on the
14 content of the information in the petition request.
15 The members have already introduced themselves.

16 As described in our process, the NRC staff
17 may ask clarifying questions in order to better
18 understand the petitioner's presentation and to reach
19 a reasoned decision whether to accept or reject the
20 petitioner's request for review under the 2.206
21 process.

22 I would like to summarize the scope of the
23 petition under consideration and the NRC activities to
24 date. On March 5th, 2014, you submitted to the NRC a
25 petition under 2.206 regarding Palisades Nuclear Plant

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1 in which you requested a number of actions. The major
2 ones concern operating with a broken impeller and flawed
3 control rod drive mechanism housing.

4 Allow me to discuss the NRC's activities to
5 date. On March 14th, 2014, the PRB reviewed your
6 request for immediate action to prevent Palisades
7 restart and determined that there were no
8 safety-significant concerns to prevent the plant from
9 restarting as scheduled. The NRC has reviewed the
10 licensee's evaluation of the impeller piece fragment
11 within the reactor vessel and concluded that it does not
12 pose a threat to the reactor and other plant components.
13 Additionally, the licensee replaced all of the 45
14 control rod drive mechanism housings prior to plant
15 startup.

16 Based on the review of the licensee's
17 evaluation related to the stuck impeller piece and
18 replacement of all CRDM housings during the refueling
19 outage, there were no immediate safety-significant
20 concerns to prevent the plant from restarting as
21 scheduled. Your request for the immediate action of
22 shutdown of Palisades and other Entergy plants did not
23 have adequate bases. Therefore, your request to
24 prevent Palisades from restarting was denied.

25 You were informed on March 19th, 2014, of

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1 the PRB's decision to deny your request for immediate
2 action. On March 24, 2014, the petition manager
3 contacted you to discuss the 10 CFR 2.206 process and
4 to offer you an opportunity to address the PRB. You
5 requested to address the PRB by phone prior to its
6 internal meeting to make the initial recommendation to
7 accept or reject the petition for review.

8 As a reminder for the phone participants,
9 please identify yourself if you make any remarks, as
10 this will help us in the preparation of the meeting
11 transcript that will be made publicly available. Thank
12 you.

13 Mr. Mulligan, I'll turn it over to you to
14 allow you the opportunity to provide any information you
15 believe the PRB should consider as part of this
16 petition.

17 MR. MULLIGAN: Good morning. Good job on
18 the CRDMs, although there was reports in the media that,
19 you know, you were going to replace a proportion of them,
20 and then you came back and replaced a larger proportion
21 of them, and then you came back and said you replaced
22 them all. So that is a, that is a good job you did.

23 You know, as far as, I guess, I mean,
24 everything associated with these broken impellers tells
25 us that Palisades is confused. They don't understand

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1 the limitations of their equipment, and they don't
2 understand how serious an issue is as far as these broken
3 impellers are.

4 And there's a lot of them. Here's a short
5 list. In 1983, they had issues with impellers, PCP
6 impellers. 1984, they had severe damage, and I contend
7 it's the same issue that caused the 2011 incident.
8 2001, there's a segment of cracked impellers that were
9 found. 2007, I originally put down 2012, but that's
10 inaccurate because you never, they never found the
11 impeller in 2012.

12 And, you know, there's reports out in the
13 media that they replaced an impeller, and I'm not sure
14 what the nature of, what they found to replace that
15 impeller in this recent outage and stuff like that. And
16 so, you know, that big question I'd like answered
17 eventually.

18 And so beyond this whole thing is, you know,
19 well, how does the NRC maintain credibility with the
20 public? And out of TMI, we discovered that there was
21 a lot of miscommunication and withholding information
22 and all sorts of rationalizations about withholding
23 information and picking and choosing the information
24 you release and stuff like that. And then once -- it
25 didn't happen.

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1 And everybody was disillusioned with the
2 agency and stuff. They had reorganization. And out of
3 it came, essentially, this system that these utilities
4 are required to disclose information, an assortment of
5 information, partially to appease and make the public
6 feel better and, more importantly, to notify, to put
7 their problems on a piece of paper so all of the
8 utilities could take a look at it and see if they have
9 the same problems so, you know, there wouldn't be
10 repeated problems and that type of stuff.

11 And out of this issue with Palisades, it's
12 just amazing what they're allowed to not report about.
13 Like I said, all these incidences with the broken
14 impellers would require the LER. You know, Palisades
15 could have, there's nothing prohibiting them from
16 throwing in an LER and stuff like that. You know, they
17 could have voluntarily submitted a bunch of these LERS
18 to document the issues and to maintain credibility with
19 the public and NRC itself and to keep track of these
20 problems.

21 You know, it's interesting. The
22 Information Notice 1985 is curious. There's different
23 vibration levels, you know. In the 1985 one, the pump
24 vibration level, according to the IN, reached the danger
25 level of 10 mils. In 2012, inspection report 2012, on

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1 October 11th, the operators noted a steep change of
2 approximately 1 mil on the pump monitor. Vibration
3 values were trending around 10.5 mils prior to the
4 perturbation, remaining steady state for around 25
5 hours and then spiked up to 22 mils for less than three
6 seconds. So, you know, I don't know why is it 10 mils
7 in the danger level and, you know, up to 25 mils during
8 this recent event and stuff?

9 It was interesting. Donald Rumsfeld
10 talked a little bit about unknowns, unknown unknowns,
11 and that was essentially about him trying to obscure the
12 fact that they didn't have any information about weapons
13 of mass destruction in Iraq. You know ..And *The New*
14 *York Times*, by the way, has a whole, the whole history
15 on Donald Rumsfeld and his unknown unknowns. They have
16 three articles. It's pretty interesting, you know, the
17 history. I like the history of everything, actually.

18 So the issue in 2001 was, and I guess up to
19 the present time, fatigue-related effects from the
20 operation of the pump in a condition beyond the maximum
21 flow rate and below the minimum net positive suction
22 head recommendations described at UFSAR and other
23 design documentation.

24 So, I mean, how is a plant allowed to run
25 outside of its designs? I mean, you guys, there's tons

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1 of you guys in the NRC and they got tons of people,
2 licensed people and highly-skilled people and stuff
3 like that. How does a plant, how is a plant allowed to
4 run outside of its designs for so many years with so much
5 damage and stuff? How come they didn't immediately see
6 what was going on here and make it so that they wouldn't
7 have anymore problems with their PCP pump impellers and
8 stuff? I mean, that's basic competence. And if you
9 can't, you know, if you can't keep up with your
10 information and your reports and stuff aren't accurate,
11 and then you run outside your plant designs, I mean,
12 you're asking for a lot of problems down the road with
13 the competence of site employees and the NRC itself that
14 they can't figure out a way to cause a plant to fix their
15 PCPs early and not consume so much agency resources and
16 their own internal resources, you know, researching
17 these issues over and over again.

18 I had a list of all the different -- sorry.
19 They had, between Information Notice 85-03 -- oh, here
20 it is -- 85-03 and its supplement and, you know, all the
21 issues associated with these impellers and there were
22 so many different things that, you know, first they
23 talked about cap screws and the cap screws weren't
24 torqued appropriately by the site. And then there's
25 the cap screws, the threads are defective. And then the

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1 cap screws were torqued appropriately by the site, but
2 it was, they weren't torqued right when they put the pump
3 together back at the -- then they talk about, in '83,
4 there's impeller damage of some sort that's so-called
5 not related.

6 So it's, you know, fatigue brought on by
7 preload at the bolts. That's the supplement. And by
8 the way, the site had not followed assembling that pump
9 back up.

10 And so then First Energy, you ain't got a
11 -- their docket, you know, there was a combination of
12 residents, residential stresses caused by improper heat
13 treatment, poor fabrication practices, stress
14 associated with starting and stopping the pumps and
15 stuff. And so we get through this thing, and everybody
16 has got, you know, there's so many rationalizations or
17 there's so many different things wrong with this pump,
18 and how can you trust, how can you trust these guys to
19 throw out an accurate report with this kind of record
20 with these impellers and stuff?

21 And so then it comes out in 2012 that it's,
22 they've missed operating the pump. How does that
23 happen? How do you prevent a plant from operating
24 outside of its USFAR? How do you change the behavior
25 of that? How do you make sure all the other plants, you

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1 know, take that seriously? If they can't keep track of
2 the limitations and the requirements of their safety
3 equipment, that is -- we can't identify the exact
4 accident that's going to happen in the future, but
5 there's going to be a bad one and a lot of people aren't
6 going to know what's going on and there's going to be
7 a lot of confusion.

8 And I've seen that where, you know,
9 something happens and people are caught with their pants
10 down and they don't know what's going on and their
11 panicking and stuff like that. I mean, that's not going
12 to be good if this kind of thing happens with an example
13 of a plant being operated with such a record.

14 The latest thing that I discovered is
15 something about an appendix of a report, there was
16 something about they put in a wrong sized impeller.
17 There's a, there's an operability and a functionality
18 thing. It sounds like they actually put a wrong sized
19 impeller inside there, and I don't know the nature of,
20 you know, I'm not sure if they purchased impellers and
21 they were wrong size and they kept them out of the plant
22 or -- it sounds like to me that they actually put them
23 in the plant. You know, it talks about, in 2012, at the
24 end of 2012, this report came out. Evidently, the NRC
25 looked at it and stuff. But, you know, I can't see it.

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1 I don't know what it's about.

2 And so, you know, like I said to the
3 inspectors yesterday, the inspectors and the branch
4 chief or whatever, you know, they were really nice
5 people and stuff. They didn't talk about, you know, we
6 went over what was the factors involved with the pumps
7 having issues and stuff like that. And the inspectors
8 didn't talk about the wrong sized pump impellers in the
9 PCP pump.

10 And so, you know, from outside, it's hard
11 to get, you know -- reading a lot of this stuff, and it's
12 helter skelter, a lot of this information. And, you
13 know, it's just not right. It should be a complete
14 documentation. And safety, you know, is scrutinized
15 ability. It's the ability of outsiders, the ability of
16 you know that people are looking over your shoulders and
17 whether we catch you or just the idea that somebody might
18 catch you is an enormous safety barrier for people, you
19 know, doing the right thing.

20 Here's the 2012 003 August 8th and response
21 to the discovery of the two pieces that resembled the
22 PCP impeller. You know, when you get into this thing
23 and resembled and apparent impeller thing, how come
24 people can't -- what is going on here with people saying,
25 oh, it could be a possibility of an impeller or it might

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1 be an impeller. Well, it's either an impeller or it's
2 not. It doesn't seem to be that hard of an issue to
3 identify. I mean, that's the first responsibility of
4 a licensee to know if it's an impeller or not an
5 impeller, to know that, you know, resembled a PCP
6 impeller, you know.

7 So why do people do that, put these weasley
8 words in here? Well, you know, if something happens and
9 that impeller is loose and we get into big problems, you
10 know, somebody can't go back and look and say we said
11 it was an -- plausible deniability. It resembled. We
12 didn't really know if it was a PCP impeller or what have
13 you.

14 So during the reactor vessel inspections of
15 2007, the licensee conducted an apparent root cause
16 analysis. The conclusion was that the pieces were most
17 likely from the DPCP. Well, what's going on? Most
18 likely from the DPCP? I mean, you could only run these
19 things knowing the facts of the condition and the
20 situations and what are the limitations of your
21 equipment. So most likely from the DPCP? Why haven't
22 they gotten it down to it's either an impeller or it's
23 not an impeller? We will be damn certain we know what
24 pump that the impeller, the piece that broke away from
25 the impeller and stuff.

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1 Additionally, the analysis explored the
2 history of the Palisades PCP impeller conditions, which
3 included repeated occurrences of cracking which have
4 been identified and instances of heavy re-circulation
5 damage. Okay. So you're playing big words with me.
6 So what does heavy circulation damage mean? Is that a
7 safe -- is a heavy re-circulation damage, is that
8 unsafe?

9 And then it goes on and says, well, which
10 rendered the impeller unfit for continued use. Is it
11 safe? Is it an unfit impeller for continued use, is
12 that a safe impeller? Is that a safe condition when
13 there's something going on there that they don't
14 understand is causing all these impellers to break off
15 and they lose pieces in there?

16 This is really interesting. When the DPCP
17 was later inspected after removal during the 2009
18 refueling outage, it did not have any pieces of impeller
19 missing. Inspections of the PCP were recommended in
20 the apparent cause and had been planned to be executed
21 and the DPCP was not the source of the 2007 pieces, was
22 canceled. The cancellation was based, in part, on
23 thoughts that the piece may have originated elsewhere.

24 So here you go. You know, it resembled a
25 PC, most likely was from the DPCP. It might have been

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1 an impeller. It could have been an impeller and stuff.
2 And it sets you up where these guys can say, oh, well,
3 we thought that it came from the DPCP, but we popped it
4 open and there was no damage in there, so it had to be
5 from the steam generators or wherever the hell it comes
6 from and stuff like that.

7 And so, you know, how come that engineering
8 is, you know, you know what's going on. You know the
9 conditions of your equipment. You know these defective
10 parts and these parts that are floating around in the
11 system, you know what they are. You get with facts and
12 evidence.

13 You know, somebody with a Ph.D., I mean, I
14 have to have triplicate evidence or proof of an
15 assertion. A Ph.D. can get there and, you know, they
16 can guess on a lot of these things. And the engineers.
17 You know, most of this is not about evidence and proof,
18 it's all about guesswork, and it irks me.

19 So a piece, I mean, they didn't hunt down
20 and figure out what these pieces were in 2009. Then
21 that leads up to the inspection of 2012, 03. So that
22 was in August 2012. The event happened seven months
23 before that, October 11th, 2011. It was safe to operate
24 until the April 12th, 2012 outage and stuff.

25 So here today we're sitting in not this

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1 outage but the outage before it. They knew that it was
2 a piece of an impeller. I mean, everybody admits that
3 it was the October 11th event of 2011, that's the
4 impeller that's in the core right now and stuff.

5 You know, the idea that -- and that prior
6 outage, you know, after they were given such leeway by
7 the NRC and stuff like that, I don't think they should
8 have been operated. Like I said, you know, the impeller
9 was unfit for continued use, and they talk about heavy
10 re-circulation damage and stuff like that. So what is
11 safe or what is unsafe? You know, everybody bandies
12 around about being safe and stuff like that, and, you
13 know, there's very little information on what is safe.

14 There's a lot of -- outside people can
15 understand, I'm telling you. You've got a reactor
16 coolant pump and it's flinging impellers, that's
17 unsafe. They don't have to go through a whole
18 calculation and stuff like that. They know that's not
19 right, and it stinks to high heaven that a plant like
20 that would be allowed to operate in such an unfit
21 condition, in such a discombobulated, confused
22 condition and stuff.

23 And so, like I was saying, and, again, so
24 here we sit in 2014. We know that an impeller got stuck
25 between the vessel and the flow skirt. That comes from

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1 2011 and stuff. So, you know, what I'm trying to get
2 at, from that 2012 inspection report, I mean, everybody
3 knows that there's an attitude of, you know, broken
4 impellers and, wink-wink, we're not going to -- you
5 know, they're apparent impellers or they're almost
6 impellers or, you know, they might be impellers, but we
7 really haven't looked close enough to be positive that
8 they are impellers and stuff like that.

9 So they have a long history of having
10 impellers, knowing we have impeller damage and not
11 saying, not stopping and saying we're going to, number
12 one, before we start up, we're going to know what pump
13 that came from, we will never allow a PCP pump to
14 operate, knowingly operate with any cracks of any sort
15 or any degradation and stuff like that, and we're going
16 to hunt down that impeller and yank it out of the core
17 and stuff like that.

18 So, I mean, you know, that impeller that's
19 sitting next to the core or the vessel or the core skirt
20 and stuff like that, there's a long history of Palisades
21 losing impellers and knowingly losing impellers and
22 dancing around with the NRC saying they're, you know,
23 talking language like it resembled a PCP impeller, you
24 know, kind of playing with words, you know, we think it's
25 an impeller, but if we get in trouble we can deny that

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1 or, especially if we do a search like we did in 2012 and
2 we can't find the impeller, well, maybe there was never
3 an impeller blade that was missing, or, you know, if the
4 NRC doesn't ask us then we won't have to tell them and
5 then we get started back up.

6 Everything about that 2012 inspection
7 report is, it's making that information inscrutable to
8 the public. So make sure that you don't discuss it
9 until not only way after the event, it's only publicly
10 discussed after the next outage and when that plant is
11 back in operation. All the dirty little linen and all
12 that sort of stuff is engineered so it's on the other
13 side of the plant operational threat, and the agency has
14 a habit of doing this all the time, you know, not
15 discussing the dirty deeds until everybody is safe or
16 you're already back up at power and it can't be
17 contested, there's no way it can be contested. It's not
18 fair. It's not allowing the public to see what's going
19 on and giving somebody a shot to ask a question and that
20 type of thing.

21 So we don't know. You know, again, you had
22 a whole bunch of, you had a whole bunch of conditions
23 post that inspection report. And, basically, you
24 talked about the sequencing of the pumps. You know, how
25 do you, how do you know a pump is within its designs and

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1 the plant is running according to, you know, the FSARS
2 or whatever it is and stuff like that?

3 So, you know, you measure its suction
4 pressure, its discharge pressure, you know, you hit the
5 pump curves and all that sort of stuff, and that's how
6 you, you know, see the green or red. It's either
7 possible conditions that pump is going to be operated
8 according to its designs. You have verifiable
9 evidence. So, you know, you guys didn't show us. It
10 was kind of blurry as far as would they really
11 protect the public and protect from any future issues
12 with broken impellers.

13 And we know that, you know, that that
14 inspection notice 85-03 or whatever it is, we know that
15 these things can lead to a severe accident. You could
16 destroy out of your four seals almost immediately, three
17 seals. And you could spew a lot of metal in the coolant
18 and have the potential of, a strong potential of
19 damaging fuel and stuff. You know, so there's a threat
20 to the pressure barrier right there that Palisades is
21 required to not have any, you know, to have their
22 pressure barrier within a certain set of quality type
23 of things and stuff. So, you know, I would think that's
24 a threat to the pressure barrier, you know, if, in the
25 future, there's other issues with the impellers

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1 breaking off and stuff.

2 You know, well, you know, the question of
3 why would these guys not have new impellers on site?
4 What makes guys like this go into this thing of doing
5 weld repairs on reactor coolant pump impellers? And
6 especially you find that these weld repairs are, you
7 know, it's the most threat to throwing blades and stuff
8 like that. I don't understand why the NRC wasn't in
9 there and saying you can't do that welding kind of stuff
10 on these impellers and stuff, you know. You can't have
11 a history of having broken impellers and stuff.
12 Where's the NRC in this, in that thing, you know?

13 So I have questions whether Palisades is
14 competent to operate that plant, and I have issues in
15 this that the NRC is competent in knowing what the
16 conditions of culture is. And you know that there's a
17 lot of confusion going on, and you're not using the right
18 tools in order to straighten these guys out and stuff.
19 You know, Palisades has been in a lot of trouble, you
20 know. Entergy, the recent issues with the stator drop
21 accident. And now it's a red finding and a yellow
22 finding.

23 When that event in 2011 was going on,
24 Palisades was starting up from their yellow finding with
25 their DC, they let their employees perform maintenance

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1 on a DC bus and it almost killed them, killed an employee
2 and stuff. And then you go into Palisades has issues
3 with the security department, their employees not
4 telling the truth. Their security employees across the
5 board for years have had issues with intimidation and
6 being afraid to speak up to their managers and stuff like
7 that. Back with that first incident with security and
8 now there's a new thing going on that we don't understand
9 really what's going on.

10 And so, you know, Entergy, site-wide, had
11 issues with, down south it had an engineer that was
12 raising issues and they tried to intimidate him and
13 stuff. So there was a lot of training about that
14 incident and stuff. They had employees in another
15 plant going on the internet in the control room and
16 stuff.

17 So I'm just saying, you know, all of a
18 sudden, to treat Palisades like they're a victim and,
19 you know, and give them all sorts of more breaks and
20 stuff like that, I just, I think that's heading in the
21 wrong direction and stuff.

22 The message here is that you can play word
23 games and you can call them apparent of almost impeller,
24 broken impeller blades and all that sort of stuff. And
25 every time you get a broken impeller, you won't be forced

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1 to shut down and repair it and, number one, find it and
2 then figure out what the hell is broken or degraded and
3 replace it with a fully-qualified reactor coolant pump
4 and stuff that you won't have problems with for decades
5 and stuff like that.

6 So what you're signaling to Palisades is,
7 oh, you can have as many broken blades as you want and
8 we'll all play around with definitions and the words of
9 apparent impellers being stuck between the skirt and the
10 core and stuff. And, you know, you can keep this
11 behavior going on for infinite. You know, every time
12 a bad, you know, scares the pants out of the staff with
13 vibration problems and throwing blades and stuff like
14 that, you know, oh, don't worry about it, you will never
15 pay the price of a shutdown. As a matter of fact, you
16 don't even have to find out where that blade went. You
17 have repeated incidences of, like, a 2007 one, like the
18 most recent one in, I don't know, last August 2012, I
19 think it's April 2012, where, you know, it's really not
20 that important that you have a big incident where you
21 lose a 5 x 12 inch impeller in there.

22 And it's really not that important that you
23 find that impeller. You can start it back up and two
24 years down the line by mistake you can find it, and then
25 you're heroes. What's up with that? Besides the

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1 point, okay, you guys pick on me because I speculate and
2 I use my imagination. Well, so where are the reports
3 on broken impellers and stuff like that, you know?
4 Where's the evidence that this kind of, this size
5 impeller is not going to lead to a 1984 event and this
6 size impeller break is going to lead to, you know, not
7 being an operational issue?

8 You know, with your recent, trying to yank
9 out that impeller piece this last outage, well, the
10 going theory is the flow, the large amount of flow pushed
11 that impeller against the skirt and the core and that
12 made it so that I guess they used 3,000 pounds to try
13 to yank it up from above and then they used some sort
14 of hammer to see if you could knock it up from below and
15 stuff. And so, you know, see, you know, why did Ph.D.'s
16 get to make guesses on what caused that impeller to be
17 stuck versus where's the evidence, you know -- on the
18 other end, you'd have to say, well, you'd have to have
19 a mockup maybe or something similar, and you'd have to
20 have the same size impeller and stuff. Yes, I know this
21 is costly and ridiculous, but you're not supposed to
22 allow a PCP impeller to break in a nuclear power plant.

23 So what is your proof that the flow actually
24 wedged that impeller in that position? What is the
25 proof of that? Is it all guesses? You know, normally,

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1 you'd kind of make a model, like I say, reenact it, and
2 then the proof is that, well, yes, shit, that thing did
3 get stuck in there with all that flow. And then you go
4 on real evidence and stuff like that and real proof and
5 studies and those kind of peer-approved reports to be
6 presented. And then we'd have some sense of well, you
7 know, this is the truth and a lot of people looked at
8 it from different perspectives.

9 You know, like I say, you know, and even the
10 NRC in this, it might be true, it's the cool down that
11 those parts contract at different rates, and that's what
12 putting the pressure on it. And, again, we don't know.
13 We don't know what kind of pressure is on that part right
14 now. We know what it is when the vessel is cooled down.
15 We don't know what it is when it's heated up. There's
16 no proof that, you know, that ten pounds won't move that
17 piece of impeller in the core today and stuff.

18 And so, you know, I don't know. I just see
19 a pattern of behavior of the issues of really not knowing
20 what gets broken in that plant. Yes, symptoms of a
21 coolant pump being thrown off impellers and nobody goes
22 searching for them blades and stuff. And so, you know,
23 whether we're safe now with that impeller being stuck
24 in the core, I know that there's been a lot of impellers
25 broken and a lot of them have been found at the bottom

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1 of the core. And this is really sloppy, unthoughtful
2 ways in which to operate a nuclear power plant.

3 And when's it going to stop? Like I say,
4 when it's going to, when's Palisades going to realize
5 that they're not allowed to operate with those kind of
6 degraded components in a nuclear power plant. They
7 should, a decade ago, the NRC should have come in there
8 and, you know, if they can't find the discipline in
9 themselves to do the right thing, then the agency is
10 supposed to behave in a way that the utility sees the
11 light and starts behaving the way they're expected to.
12 I don't know what's in other PWRs, what's the -- and
13 this, again, there's a problem there because it's not
14 documented.

15 I suspect there's a lot of plants out there
16 that don't have PCP problems as Palisades, just like
17 there's a lot of plants out there that don't have control
18 rod drive mechanisms, these kinds of repeated problems
19 over decades like Palisades and stuff like that. When
20 is Palisades going to be treated like a regular plant?

21 You know, and then they get all these
22 different kind of, they've got flaws and stuff, and then
23 they're getting all sorts of special permission from the
24 NRC to not go according to ASME. You know, again, you
25 know, it's just -- oh, so here it is. When the fixes

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1 post 2012-003, you had a monitoring plan. A monitoring
2 plan? A monitoring plan? How about making sure that
3 that equipment is of a proper quality that those things
4 never happen again? So where's that? Monitoring
5 plan? It boggles the mind.

6 Change the preferred sequence of starting
7 and stopping pumps during startup and shutdown,
8 corrective action to explore further procedure changes
9 regarding PCP and operations and result in other aspects
10 of other, result in impacts of other aspects of plant
11 operation.

12 CHAIR LUND: Okay, Mr. Mulligan. You have
13 about ten more minutes. This is Louise Lund.

14 MR. MULLIGAN: Oh, thank you, yes. Cyclic
15 pressures and stresses are created under reduced
16 pressure conditions. So I just don't get how the NRC
17 allows the plant to operate like that without -- I mean,
18 has PCP pumps been placed in a condition that they're
19 in accordance to FSAR and other pump design documents?
20 I ask the inspectors and the branch chief yesterday, and
21 I got a kind of fuzzy answer. I didn't, I didn't -- and
22 another thing is that, well, why are they doing that?
23 Okay, that was a nice inspection report in 2012, 003,
24 but, you know, the agency doesn't explain why they were
25 doing that, you know. What were the motivations of

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1 operating outside the FSAR and the other -- for so long,
2 you know? Like I talked about, you know, how long is
3 the exposure rate? The NRC talks about it being limited
4 to 2007, and I think, like I talked about, I think the
5 1984 one and this most recent one are basically the same
6 incident and the exposure rate. Does the NRC get to
7 say, well, arbitrarily, it's from 2007, you know, back
8 then?

9 How come the NRC didn't, you know, they
10 mentioned a 1984 event back in 2012. How come they
11 didn't explain in that inspection report to the
12 community, you know, they had a pretty terrible accident
13 in 1984. It wasn't just a blade letting loose. They
14 had serious damage to a pump. Why didn't they kind of
15 inform us of that more closely on that 1984 event and
16 stuff?

17 I mean, that's what I'm saying. Does the
18 NRC get to pick and choose? You know, they got a list
19 of ten things that causes an event, and they can pick
20 the top five things to disclose to the public, the ones
21 that reflect well on Palisades? I mean, that's what it,
22 that's the issue. If you don't got your documents
23 straight and you don't report to us in a
24 straightforward, honest manner, instead of playing
25 these word games, how can you expect public confidence

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1 and stuff?

2 And, you know, a plant like Palisades, say
3 there's another plant that acts in the same way. Do you
4 think that if they get into a big problem, if they get
5 into a big accident, and all of a sudden you have to
6 disclose all this sort of stuff, do you think it's going
7 to end well? You think it's going to reflect well on
8 the agency and the utility and all that sort of stuff?
9 Do you think, with all this kind of confusion,
10 engineering confusion running rampant, it's going to
11 end in a good way?

12 You're going to have an accident, and then
13 you're going to have an accident on top of it because
14 you didn't, you weren't communicating for decades in an
15 appropriate manner. And you didn't have that bank
16 buildup of honesty in the public there. Well, I know
17 the NRC, and I know these guys, they're particular as
18 hell and they make everybody document everything. You
19 know, out of this thing here, you can make the case that
20 is the exact opposite.

21 These guys, I don't know what kind of rules
22 they follow, but it ends up that an event like these
23 pumps are never documented, are arbitrarily put in an
24 inspection report because, you know, not because the
25 inspector sat there and says, boy, that's an interesting

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1 thing, you know. I looked at the suction pressures and
2 the discharge pressures and the pump curves, kind of we
3 expect that at the NRC. You know, it doesn't fit. And
4 so they're not operating in accordance to the FSAR and
5 the procedures. And you throw up an inspection report
6 before the damage was shown. That's what you'd expect
7 out of the agency, you know, not have to have triplicate
8 proof that damage has occurred but to kind of, oh, well,
9 these guys aren't operating in accordance to their FSARs
10 and we're going to pick up that problem before the damage
11 shows and stuff like that.

12 Why can't the agency be proactive and ask
13 difficult questions, instead of waiting for, you know,
14 the evidence of multiple examples of broken impeller
15 blades to show up? And then they kind of get half honest
16 and stuff.

17 And so, I mean, I've had issues. As an
18 example, with Pilgrim relief valves that Palisades
19 bought -- not Palisades. Pilgrim bought four brand new
20 relief valves, stuck them in there, and then for the next
21 operating cycle they had repeated power ups and power
22 downs because those guys were leaking. And,
23 essentially, the NRC and Pilgrim, you know, wink, wink,
24 wink, we don't have to report anymore. The crap out of
25 TMI, that doesn't matter anymore. We've got rules in

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1 here that says that we don't have to make an LER report
2 that is accurate, that is detailed and stuff. And if
3 we write it up, it's on the other side of the operability
4 issues or the threat of a plant being shut down. The
5 agency will never give outsiders the opportunity of
6 having information available that should prove that
7 that plant is unfit to be operating.

8 The bad stuff only comes out after the
9 operability issues are over with and stuff. So there.
10 Vermont Yankee had the same related issues with their
11 SRV valves and stuff like that. And we've had issues
12 in trying to follow it in the inspection reports and in
13 the LERs, and it's really poor reporting.

14 You know, I know what's going on here.
15 They're saying these utilities and you guys are saying,
16 oh, well, we've put all this information in our
17 corrective actions and all these different kind of
18 internal reports. See, you shifted from the lessons of
19 TMI, of being honest, building up that bank of
20 credibility, and getting these documents -- Jesus, you
21 know, that was a miracle when they came out with LERs
22 and post TMI and stuff like that.

23 And, you know, it was quite detailed, a lot
24 of those reports, which they aren't. Case after case
25 after case where, you know, the agency is just meeting

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1 its minimum requirements to document issues at these
2 plants. They don't have no sense of, as far as I'm
3 concerned, professionalism or what really the public
4 wants and stuff like that. So they're reporting this
5 crap at a minimum level or less, and we don't have any
6 really ways to, you know, present our side of the story
7 and stuff like that and see about these inspection
8 reports. You know, there's no open way to criticize,
9 oh, this is a skimpy inspection.

10 I hear this next one is going to be quite
11 thorough in justifying why that blade is stuck in the
12 core and stuff like that. But -- all right.

13 CHAIR LUND: Mr. Mulligan, let me go ahead
14 and move to the question period. So at this time, does
15 the staff here at Headquarters have any questions for
16 Mr. Mulligan?

17 (No response.)

18 CHAIR LUND: Okay. And what about the
19 region?

20 (No response.)

21 CHAIR LUND: Does the licensee have any
22 questions?

23 MS. DOTSON: We have no questions.

24 CHAIR LUND: Okay, thank you. And are
25 there any members of the public on the phone, besides

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1 Mr. Mulligan?

2 (No response.)

3 CHAIR LUND: Okay. Before I conclude the
4 meeting, members of the public may provide comments
5 regarding the petition, ask questions about the 2.206
6 process. However, as stated in the opening, the
7 purpose of this meeting is not to provide an opportunity
8 for the petitioner or the public to question or examine
9 the PRB regarding the merits of the petition request.

10 So, again, is there anybody from the member
11 of the public who would like to ask a question?

12 (No response.)

13 CHAIR LUND: Okay. So in closing, Mr.
14 Mulligan, thank you for taking time to provide the NRC
15 staff with clarifying information on the petition you
16 have submitted. Before we close, does the court
17 reporter need any additional information for the
18 meeting transcript?

19 COURT REPORTER: I'm okay for now. Thank
20 you.

21 MR. MULLIGAN: And I appreciate this
22 opportunity, and I appreciate the branch chief and the
23 two inspectors, I was talking with them yesterday, I
24 appreciate and thank the agency very much.

25 CHAIR LUND: Okay. Thank you for that

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1 feedback, Mr. Mulligan. And the court reporter, did
2 you need anything else?

3 COURT REPORTER: No, thanks.

4 CHAIR LUND: Okay. With that, the meeting
5 is concluded, and we will be terminating the phone
6 connection. Thank you.

7 (Whereupon, the above-referenced matter
8 was concluded at 12:02 p.m.)

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