

**Official Transcript of Proceedings**  
**NUCLEAR REGULATORY COMMISSION**

Title: 10 CFR 2.206 Petition Review Board  
Teleconference with Petitioner, Michael  
Mulligan, Citizen, re: 2.206 - Emergency  
Ultrasonic Inspection Test or Best Available  
Flaw Detection Technology for USA Reactor  
Plants Similar to the Thousands of Cracks  
Discovered in Belgium Nuclear Power Plants.

Docket Number: 50-271

Location: teleconference

Date: Tuesday, May 19, 2015

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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

BELGIUM NUCLEAR PLANT VESSEL CRACKS IN USA PLANTS

+ + + + +

TUESDAY,

MAY 19, 2015

+ + + + +

The conference call was held, Rob Taylor,  
Chairperson of the Petition Review Board, presiding.

PETITIONER: MICHAEL MULLIGAN

PETITION REVIEW BOARD MEMBERS

ROB TAYLOR, Petition Review Board Chairman

STEPHEN KOENICK, Petition Manager

BOB HARDIES, Senior Technical Advisor

MERRILEE BANIC, 2.206 Petition Coordinator

PATRICIA JEHLER, Office of the General Counsel

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MEENA KHANNA, Branch Chief

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STEPHEN HAMMANN, Region 1

VIJAY MEGHANI, Region 3

JOON PARK, Region 3

REPRESENTATIVES FOR THE LICENSEE

PHILIP COUTURE, Entergy

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## P R O C E E D I N G S

2:05 p.m.

MR. KOENICK: I'd like to thank everyone for attending this meeting. My name is Stephen Koenick. I'm a Project Manager in the Division of Reactor Licensing.

And we're here today to allow the Petitioner, Michael Mulligan to address the Petition Review Board regarding his 2.206 Petition dated March 25, 2015[sic] submitted by email on March 26, 2015.

I'm also the Petitioner Manager for this Petition. And the Petition Review Board Chairman is Robert Taylor.

As part of the Petition Review Board's review of this Petition, that can now be found in Adams under accession number ML15090A487. Michael Mulligan has requested this opportunity to address the Petition Review Board.

The meeting is scheduled from 2:00 to 3:00 p.m. eastern time. The meeting is being recorded by the NRC Operations Center. And will be transcribed by a Court Reporter.

The transcript will become a supplement to the Petition. And the Transcript will also be made publicly available.

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1                   So I'd like to open this up with  
2                   introductions. I'd like the rest of the Petition  
3                   Review Board to introduce themselves. What we'll do is  
4                   we'll go around the room here at Headquarters. And then  
5                   we'll figure out how to get everybody on the phone.

6                   So first, I'd like to turn it over to Rob.

7                   CHAIRMAN TAYLOR: Hi, this is Rob Taylor,  
8                   Chair of the PRB.

9                   MR. HARDIES: I'm Bob Hardies, Senior  
10                  Level Advisor, Office of Nuclear Reactor Regulations,  
11                  Division of Engineering.

12                  MS. BANIC: Lee Banic, 2.206 Petition  
13                  Coordinator, NRR.

14                  MS. JEHLE: Patricia Jehle, Office of the  
15                  General Counsel.

16                  MS. KHANNA: Meena Khanna, Branch Chief in  
17                  the Division of Operating Reactor Licensing.

18                  MR. KOENICK: Excellent. So that's here  
19                  with us at Headquarters. Can we go through any other  
20                  NRC participants from Headquarters on the phone?

21                  MR. CARPENTER: This is Rob Carpenter, OE.

22                  MR. KOENICK: Okay. Any other  
23                  Headquarters participants?

24                  (No response)

25                  MR. KOENICK: Hearing none, are there any

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1 Regional Office -- participants from Regional Offices?  
2 We can start from Region I?

3 MR. HAMMANN: This is Steve Hammann from  
4 the Region I, Decommissioning and Technical Support  
5 Branch.

6 MR. KOENICK: Okay. Region II? We  
7 probably don't have anybody from Region II.

8 (No response)

9 MR. KOENICK: Region III?

10 MR. MEGHANI: This is Vijay Meghani and  
11 Joon Park from Region III, Division of Reactor Safety.

12 MR. KOENICK: Excellent. And Region IV, I  
13 don't believe we have anyone?

14 (No response)

15 MR. KOENICK: Okay. Are there any  
16 representatives for the licensee on the phone?

17 MR. COUTURE: Phil Couture with Entergy.

18 MR. KOENICK: And the Court Reporter is on  
19 the line?

20 COURT REPORTER: Yes, Sir. Dylan Stroman  
21 with Neal R. Gross Court Reporters.

22 MR. KOENICK: Thank you. Okay. Is there  
23 any -- are there any other members on the call that have  
24 not been identified? With the exception of our  
25 Petitioner? We'll get to you last.

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1 (No response)

2 MR. KOENICK: Okay. Hearing none,  
3 Michael Mulligan, would you please introduce yourself  
4 for the record?

5 MR. MULLIGAN: Hello. I'm Michael  
6 Mulligan. I live in Hinsdale, New Hampshire. I'm a  
7 whistle blower. I worked at a nuclear plant, for  
8 Vermont Yankee for ten years or so.

9 I was in the Navy on a submarine, on a  
10 nuclear submarine. And that's it.

11 MR. KOENICK: Okay. Thank you. I'd like  
12 to emphasize that we need to speak clearly and loudly  
13 to make sure that the Court Reporter can accurately  
14 transcribe this meeting.

15 If you do have something that you would like  
16 to say, please first state your name for the record.  
17 And for those dialing into the meeting, please remember  
18 to mute your phones to minimize any background noise or  
19 distractions.

20 At this time I'd like to turn it over to the  
21 PRB Chairman, Robert Taylor.

22 CHAIRMAN TAYLOR: Thanks, Steve. This is  
23 Rob Taylor from the Deputy Director of NRR's Division  
24 of Safety Systems. And I'll be serving as the PRB  
25 Chairman for Mr. Mulligan's Petition that we're

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1 discussing today.

2 Mr. Mulligan, thank you for submitting your  
3 Petition. I think you're familiar with the process.  
4 But there are some aspects that I do want to go through  
5 at the beginning here before we get into your discussion  
6 and presentation.

7 Just for some background on the process.  
8 Section 2.206 of Title 10 of the Code of Federal  
9 Regulations describes the Petition process. The  
10 primary mechanism for the public to request enforcement  
11 action by the NRC in a public process.

12 This process permits anyone to petition NRC  
13 to take enforcement type action related to NRC licensees  
14 or licensed activity. Depending on the results of this  
15 evaluation, NRC could modify, suspend or revoke an NRC  
16 issued license or take any other appropriate  
17 enforcement action to resolve the problem.

18 The NRC staff guidance for this position of  
19 2.206 Petition Request is in management directive 8.11,  
20 which is publically available.

21 The purpose of today's meeting is to give  
22 the Petitioner, Mr. Mulligan, an opportunity to provide  
23 any additional explanation or support for the Petition  
24 before the Petition Review Board's initial  
25 consideration and recommendation.

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1 I want to be clear that this meeting is not  
2 a hearing. Nor is it an opportunity for the Petitioner  
3 to either question or examine the PRB on the merits of  
4 the issues presented in the Petition Request.

5 No decisions regarding the merits of this  
6 Petition will be made at this meeting. Following this  
7 meeting the Petition Review Board will conduct its  
8 internal deliberations. The outcome of this internal  
9 meeting will be discussed with the Petitioner.

10 The Petition Review Board typically  
11 consists of a Chairman, myself, usually a manager at the  
12 senior executive service level at the NRC. It has a  
13 Petitioner Manager and a PRB coordinator, who have  
14 introduced themselves during the opening of this  
15 meeting.

16 Other members of the Board are determined  
17 by the NRC staff based on the content of the information  
18 in the Petition Request. The members have already gone  
19 around and introduced themselves, including the subject  
20 matter experts that will weigh in or evaluate Mr.  
21 Mulligan's Petition.

22 As described in our process, the NRC staff  
23 may ask clarifying questions in order to better  
24 understand the Petitioner's presentation and to reach  
25 a reasoned decision whether to accept or reject the

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1       Petitioner's request for review under the 2.206  
2       process.

3               I'd like to summarize the scope of the  
4       Petition under consideration and the NRC activities to  
5       date. On March 26, 2015, Mr. Mulligan submitted to the  
6       NRC, a Petition under 2.206 regarding Kewaunee Nuclear  
7       Power Plant and Vermont Yankee Nuclear Plant. And the  
8       operating U.S. Nuclear Plants in which he requested a  
9       number of actions.

10              The major ones are as follows. He  
11       requested immediate full scale ultrasonic inspections  
12       similar or with better technology on Vermont Yankee and  
13       Kewaunee. He requested large bore hole samples be cut  
14       out of both vessels and transport the vessel specimens  
15       to a respected metallurgical laboratory for  
16       comprehensive offsite testing.

17              He requested an immediate NRC report and  
18       public meeting on the vulnerabilities with U.S. reactor  
19       cracking and these weakened vessels. He requested all  
20       U.S. plants be ultrasonically tested within six months  
21       if distressed and unsafe results are discovered.

22              Now, let me take a moment to discuss the NRC  
23       activities to date. On May 4 of this year, the  
24       Petitioner Manager contacted you to discuss the 10 CFR  
25       2.206 process. And to offer you an opportunity to

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1 address the PRB.

2 Mr. Mulligan requested to address the PRB  
3 by phone prior to its internal meeting to make the  
4 initial recommendation to accept or reject the Petition  
5 or review it.

6 On May 13 of this year, the Petition Manager  
7 arranged a courtesy call with the NRC technical expert,  
8 Robert (Bob) Hardies to discuss the Petition. The call  
9 between Mr. Mulligan, Mr. Hardies and the Petitioner  
10 Manager took place last week.

11 As a reminder for the phone participants,  
12 please identify yourself if you make any remarks. As  
13 this will help us in preparation of the meeting  
14 transcript that will be made publically available.  
15 Thank you.

16 Mr. Mulligan, with that, I'd like to turn  
17 it over to you, to allow you an opportunity to provide  
18 information you believe the PRB should consider as part  
19 of this position. We've allocated 40 minutes for your  
20 presentation.

21 MR. MULLIGAN: I'm Mike Mulligan. Thank  
22 you very much for this opportunity. I generally know  
23 that I'm very lucky to be living in the United States  
24 of America.

25 I know that if this was -- I mean, if I had

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1 this concern in another country, say Russia or China or  
2 something like that, you know, they'd probably find me  
3 on the side of the road dead.

4 So, I know that we live in the greatest  
5 nation on the planet. And I'm thankful to be living  
6 here. I thank the NRC for this opportunity.

7 I really thank them for talking -- for  
8 allowing me to talk with Mr. Hardies. He was a -- he  
9 just -- he was extraordinary as far as his abilities.

10 As far as you talked about, as far as for  
11 Vermont Yankee and Kewaunee, I essentially wanted  
12 either ultrasonic testing or the best technology or  
13 similar to what they did over in Belgium or over in  
14 Europe and stuff like that. So, I don't know if I said  
15 that right in the way you just got done talking about  
16 it.

17 We know with any crack in the vessel, none  
18 have been discovered so far in that. In the worst case,  
19 if a crack happened and it was large enough, and it would  
20 basically bypass a lot of designs of the facility.

21 And so it would be a particularly nasty  
22 accident. The most likely result would be a small leak  
23 or -- but you never know. And the systems will be able  
24 to handle it.

25 But, that would just be marginally better

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1 then the worst case. Because it would bring terrible  
2 repercussions to the nuclear industry.

3 Even if we -- even if, you know, we went  
4 through this and we did a lot of investigations on the  
5 vessels we're testing, even finding a core crack would  
6 be pretty dramatic as far as what it would do to the  
7 industry.

8 As far, you know, if you -- generally, most  
9 of the vessels have been immune to inspections. I know  
10 they do ten year inspections on, thanks to Mr. Hardies,  
11 on the weld areas and that type of stuff.

12 But it would be terrible repercussions.  
13 Because it would, you know, question the NRC. It would  
14 question the utilities. You know, how come, you know,  
15 how come the reactor vessels weren't fully inspected and  
16 have ultrasonic testing or better.

17 It's interesting, the Belgium nuclear  
18 regulator, the FANC, the Federal Agency for Nuclear  
19 Control, here's a quote. This is how they discovered  
20 it. In 1912 -- in 2012, a new type of in-surfaced ISI  
21 inspection of the reactor vessel by ultrasonic testing  
22 was introduced in the Belgium nuclear plants.

23 These inspections were introduced in  
24 France in order -- and to search for underclad cracks  
25 that may be presented in the base metal directly below

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1 the interface to the cladding. These underclad cracks  
2 if present, have particular orientations at a surface  
3 and were created by the welding process of the  
4 austenitic strip cladding and to the ferric base metal.

5 The underclad is like, I imagine is, it's  
6 like our cladding in our domestic vessels that are  
7 inside the -- that are on the outside -- inside the --  
8 on the surface of inside the vessel.

9 So, I -- in talking with Mr. Hardies, we  
10 talked about taking samples of some shutdown reactor  
11 vessels similar to the Belgium reactors. And I know  
12 what Mr. Hardies wants for Christmas next year. And  
13 that there would be samples taken from an assortment of  
14 reactor vessels.

15 That would be to cut out a piece of the  
16 reactor vessel. And then bring it into a laboratory and  
17 to, you know, to go wild with the testing and stuff like  
18 that.

19 And as far as my understanding that would  
20 be a wonderful idea as far as the verified and knowledge  
21 that we have. And as far as what happens, what a reactor  
22 vessel during its life.

23 And it would help us, you know, to do a lot  
24 of testing that might discover some other flaws in the  
25 reactor. And just like with the Belgium reactors, you

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1 know, they went on a journey looking for one type of flaw  
2 and they discovered a completely different flaw.

3 One thing should be noted, is that they had  
4 a discover -- they had to institute a special kind of  
5 ultrasonic test. It sounds like it was more sensitive  
6 then normal.

7 And then as this thing went on, they decided  
8 that they even need a more sensitive type of ultrasonic  
9 test. And I think there's a lot of limitations with  
10 ultrasonic tests.

11 You should get it in -- if you could get some  
12 of these, you know, these specimens into the -- into a  
13 laboratory, you know, you could be -- you could have more  
14 confidence that this type of accident would never happen  
15 in the United States fleet.

16 AREVA recently had troubles -- well,  
17 basically, it's my -- I've become educated with this  
18 kind of problem. And I made a set of poor assumptions  
19 whenever I started this.

20 But today it's generally, it's a forging  
21 issue. And either did a state of the art type of thing.  
22 They didn't think about it or there was a shortcoming.  
23 And forging -- and during the forging process, water was  
24 inside the forging as they were pouring it. And as it  
25 was cooling down.

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1                   And in this process, hydrogen was released  
2                   from the water. And it's this hydrogen business that's  
3                   causing hydrogen flaking, as far as I think, was going  
4                   on.

5                   But I'm no expert. I do have a little  
6                   better understanding of what's going on here. And  
7                   there's uncertainty. You know, like there's  
8                   uncertainty if we can see everything in the vessel as  
9                   it sits right now.

10                  Especially when we don't do a lot of  
11                  testing. We only test a small part of the vessel. And  
12                  there is uncertainty with the forging process. And  
13                  there's even uncertainty with the forging today, what's  
14                  going on. Which is really astounding.

15                  With AREVA, they had lower than their  
16                  expected mechanical toughness properties. In other  
17                  words, it's weaker and probably it would -- cracks would  
18                  proliferate more easily.

19                  It revolves generally around high carbon  
20                  contact. It's a -- that's what's the mechanism that  
21                  makes the metal weaker. And it is a simple forging  
22                  problem that everybody's astonished that they didn't  
23                  detect.

24                  And you notice that. And even with all the  
25                  -- even if there is no radiation on it in the vessel or

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1 because the vessels are quite radioactive. AREVA still  
2 didn't discover the flaws until much like they even got  
3 one and the reactor plant just, you know, almost it's  
4 all buttoned up and stuff. And they're going to have  
5 to take it apart, take it out or something.

6 And so there you go again. Some of this  
7 stuff is hard to detect. And there's uncertainty of the  
8 bureaucracy. Are they capable of discovering these  
9 things? It's like I said, that accented so bad. You  
10 know, you can imagine if they -- or could be so bad.

11 You could imagine if it was, like I said,  
12 a small crack was discovered and the repercussions would  
13 be so dock and dire. You know, that would be hard to  
14 stay to yourself. We've got to disclose this.

15 There would be a lot of pressure to not  
16 disclose things. You know, maybe you get -- the higher  
17 ups might not know about it. But the lower guys would  
18 sit there and say holy smokes, you know, maybe the best  
19 thing to do is keep this quiet.

20 Mr. Hardies is a Chief of Component  
21 Integrity Branch of the Division of Engineering in the  
22 Office of Nuclear Regulatory Research. He gave me a  
23 pretty neat phrase. He said, you never know what is  
24 discussed be -- you never know what is discussed  
25 privately between the licensee and a regulator.

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1 He was talking about the Belgium guys. And  
2 all I know is it was an interesting comment.

3 What is most interesting to me is the  
4 Belgium regulator, they, you know, they went back and  
5 then said they've got to do some more testing. They  
6 tested hydrogen flakes in a test reactor.

7 And they put a lot -- put these pieces of  
8 metal in a heavy radiation field. And the preliminary  
9 results, the material properties, fracture test  
10 toughness, is more strongly affected by radiation than  
11 predicted in theoretical models.

12 And that, you know, I've talked to a few  
13 people. And they basically say we -- between us and the  
14 Europeans, we all generally got only a few of these  
15 companies that do these kind of testings, contractors  
16 or whatever have you.

17 And they're generally more alike than not  
18 alike. And that type of thing. And they're all  
19 intermixed and the information is kind of shared between  
20 them and all that sort of stuff.

21 So, you know, we're -- like I said, we're  
22 more alike than not. And so, you know, and so to have  
23 -- the big thing is this testing of this metallic flake,  
24 you know, is raising questions of their modeling of the  
25 metal and how it responds.

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1           And that's a, you know, that's a -- the  
2 regulators are usually looking for proof. You know,  
3 everything they do is they look for proof. And they,  
4 you know, they want everybody to have evidence and all  
5 that sort of stuff.

6           And I think the harder things a lot of  
7 times, because there's nothing there. And so a lot of  
8 times it only really revolves around what's in your  
9 head. And that is the idea of what are the  
10 uncertainties associated with say the reactor vessel?

11           And that's the things that, you know, you  
12 can't prove. And that is very worrisome. So, and you  
13 know, I think the United States of America, you know,  
14 the greater public would say, you know, we don't want  
15 to push on the reactor vessel inspected or tested.

16           We want the vessel tested with the best  
17 technology available. We're the greatest nation on the  
18 planet. And we understand that it's probably an action  
19 that's very infrequent. But if you had one, there would  
20 be a tremendous amount of consequences to it.

21           And so I think the public would say, we want  
22 to know the absolute current best technology type of  
23 condition that the reactor vessels are in now. And we  
24 want proof that, you know, that this terrible event  
25 wouldn't occur.

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1           So like I said, I was told that, you know,  
2           the ultrasonic testing on the welds happen every ten  
3           years. It's from the insides and that. And the most  
4           worrisome aspect about that is that Mr. Hardies told me  
5           that there was never any flaw discovered in it.

6           And we look around and now once I talked  
7           about the reactor heads, you know, once those were  
8           considered a perfect barrier. And there was a lot of  
9           margin of safety there. And the fact that barrier  
10          should not -- should not, you know, there's no evidence  
11          that the reactor heads could have a flaw in it.

12          Of course, now we know. Even as the  
13          evidence and leaks were building up, the Agency and the  
14          FirstEnergy failed to prevent that kind of an accident.  
15          And stuff and we know that most of the Agency and  
16          FirstEnergy had terribly flawed bureaucracies.

17          And I think if we could have seen a lot of  
18          that, you know, if it was disclosed to the outsiders,  
19          you know, and people would have rebelled. And we would  
20          have fixed you. If we could see the flaw, the  
21          bureaucratic flaws in both the agency and the utility  
22          and stuff.

23          And so that was a -- that was one of the  
24          lessons learned, is how much we don't know about what  
25          these bureaucracies do behind our backs and stuff. And

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1 so, the reactor heads, we know that have flaws.

2 And we know a lot of different nozzles and  
3 piping right next to the reactor have a -- they  
4 discovered flaws in it or cracks in it and they dig them  
5 out -- dig out the flaw and reweld it and stuff like that.

6 What is surprising is that in all this  
7 testing in all these reactors, they never found one flaw  
8 in it, in the weld area and stuff. It just doesn't make  
9 sense. To me it doesn't.

10 And you know, they might have found a couple  
11 of flaws that were there, you know kind of, or a couple  
12 of indications that looked like a flaw. And then go in  
13 there and did we report about it? We thought there was  
14 a flaw in the core.

15 We discovered a flaw and we fixed it and all  
16 that sort of stuff. But to never discover a flaw in the  
17 welding -- in the components that were welded together  
18 of a vessel is kind of a -- doesn't -- it's nonsensical  
19 to me if you really want to know.

20 And the implications are that, you know,  
21 you're not using the best technology and the most  
22 sensitive technology available. And like I said, you  
23 know, with the Belgium guys, they went in hunting for  
24 one thing with sensitive gear. And that's how they  
25 discovered the metallic flakes.

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1                   So that kind of raises -- then they jacked  
2                   it up again. And you know, they found tens and  
3                   thousands of them and stuff. So, that just -- there's  
4                   a question of whether we're using the right sensitivity  
5                   for detecting these flaws.

6                   You know, there's questions if we're  
7                   looking -- not looking at the whole vessel also. I  
8                   think, I don't know. You know, maybe when it was new,  
9                   it was -- we couldn't -- we, you know, we used the best  
10                  technology to look for flaws in these vessels.

11                  And you know, and then decided, you know,  
12                  and then we're all busy with new construction and all  
13                  that sort of stuff. And we just couldn't conceive of  
14                  the ideas that these vessels could develop a flaw later  
15                  in life.

16                  I know you have coupon testing. And I know  
17                  you have a lot of secondary I'd call it of theoretical  
18                  models of what radiation does to these vessels and stuff  
19                  like that. You have a lot of that.

20                  But that's not -- that's not -- that's, you  
21                  know, that's that better theoretical stuff that I talked  
22                  about that is placed in question. Are your models all  
23                  accurate and stuff.

24                  And I think there's a lot of uncertainty  
25                  there to be truthful. And I think, you know, the United

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1 States deserves to have proof with the best technology  
2 available that these vessels are safe.

3 You know, like I said, maybe if we go in and  
4 take the worst case PWR and take a couple of samples out  
5 of there. Do a couple of ultrasonic tests of a dead  
6 vessel and stuff, then you have like a, you know, you  
7 would have a more sense of what might be going on there.

8 And then of course if you did find flaws in  
9 the vessel, then you'd have to, you know, just like  
10 jacking it up as far as going to all the rest of the  
11 plants and demanding that they do similar kind of  
12 testing. That would be the kind of things that I am --  
13 I'm asking for in this.

14 It's been noted, this is sound -- this is  
15 going to sound like, you know, not another issue. But  
16 the flipping the Palisades primary cooling pump power  
17 went out. One official told me that, you know, that  
18 basically these components sit in the bottom of the  
19 core.

20 That the blades break off and they found one  
21 between the core shroud and stuck in the core. And then  
22 there was a lot of other parts in different areas.  
23 There was Salem 2 was the same problem.

24 But one official told me, NRC official said  
25 -- basically implied that these guys sit in the bottom

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1 of the thing and they stay there the whole cycle.

2 And I had a recent -- a different official  
3 tell me that oh no, those, there's a lot of flow in --  
4 and now I'm paraphrasing, there's a lot of flow inside  
5 these vessel -- the bottom of the core. And these  
6 things are banging around.

7 And we just discovered cladding damage  
8 caused by components being in the bottom of the vessel  
9 and stuff. And you hear, you know, there's never no  
10 pictures of what kind of cladding damage there was.

11 And again, you know, I worry about the  
12 missing cladding. And what the vessel metal behind it,  
13 you know, would do in a reactor vessel.

14 I know that there is oxygen. Somebody said  
15 that there might be oxygen -- there was oxygen missing  
16 in the vessel. But on the other hand, I know that oxygen  
17 gets disassociated in water and a radiation field and  
18 there is oxygen in there.

19 And I know that oxygen sometimes collects  
20 up at the top of patrol light mechanisms in the housing.  
21 And that causes hydrogen and oxygen and causes all sorts  
22 of corrosion problems. And well, at least it did on one  
23 plant. I don't know, I can't say for certainty if they  
24 did.

25 So, I see a lot of uncertainty. Here, let

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1 me just -- I'm talking about this. Mr. Hardies sent me  
2 this, the metallurgical sent me this document.  
3 metallurgical -- metallurgical, what am I talking  
4 about?

5 Nope, I was going to give it to him or --  
6 well, anyways, the metallurgical aspects influence had  
7 a potential for hydrogen flakes and forging for reactor  
8 pressure components. You know, in the Belgium, seeing  
9 all of their docket, I never seen any blackouts or  
10 security or hidden information.

11 So, you know, I count -- so this document  
12 is filled with blacked out pieces, information missing.  
13 That you know, either is privacy issues or I don't know  
14 what, you know, security issues.

15 And so, you know, there's 16 huge chunks of  
16 this document missing information because the NRC  
17 refuses to release it. One of the most interesting  
18 pieces of blacked out or redacted information is, you  
19 know, the -- at the bottom of this document, there's the  
20 references. And three of the references are blacked  
21 out.

22 I mean, it's just, you know, the labels or  
23 the headings or the titles of the documents are too  
24 classified. Or, you know, might give secrets away or  
25 something.

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1 I mean, it's just ridiculous. So this goes  
2 to kind of like what I'm saying about bureaucracies.  
3 You never know what they -- you never know the reasons  
4 why they're hiding things.

5 They say they might have one reason. And  
6 all that sort of stuff. But there's never -- there is  
7 not an independent outside person or an organization  
8 looking and say for the NRC, is this legitimate that all  
9 this information is missing and stuff?

10 Or should the public, you know, it might be  
11 private information or competitive information. But  
12 there's countervailing public interests in releasing  
13 this information. And that is, you know, like I said,  
14 would be to have an outsider have, maybe have the power  
15 to, you know, straighten out our bureaucracy like  
16 Davis-Besse or the situation in that incident there and  
17 stuff.

18 And so we would never have a Davis-Besse  
19 accident and stuff. So we debate these issues and fully  
20 as the problem is developing. And you know, because  
21 everybody afterwards, Davis-Besse said, you know, we  
22 all had flaws. We had terrible flaws. And letting  
23 this plant, you know, run away from us and stuff.

24 And you know, part of that would be that you  
25 disclose all your flaws and you let the outsiders help

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1       you -- help you -- and it would probably be painful.   But  
2       it would help you clean up your bureaucracies.

3               And you know, that's always been my hope  
4       that we'd have a strong industry and a strong NRC.  
5       Where a lot of this stuff, this nonsense doesn't emerge  
6       and is corrected before it happens.

7               And so there would be less negative  
8       information out there that people use.   And well, use  
9       in a wrong way.   So, you know, it seems to be, to me I've  
10      seen a lot of the incidences that I've read about,  
11      inability to anticipate cracks and corruptions.

12              I wish, you know, as far as taking them  
13      samples, I wish the Agency would get, you know, move  
14      heaven and earth as far as getting these samples from  
15      some of these reactor vessels.

16              And I know that there's a radiation versus  
17      an altruism or doing good type of conflict here and  
18      stuff.   But, you know, I don't know, is that an excuse  
19      not to do it?

20              I know -- I can't think of -- Yankee Atomic  
21      over in -- when they were shutting down and their  
22      controversy after they were shut down.   And that was the  
23      question, what are you going to do with the core?

24              And the idea of taking samples of the core  
25      came up.   And basically, they said that there was more

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1 -- they were afraid of more negative information to the  
2 industry then that might do finding information that  
3 would be positive information.

4 In other words, they thought it was a risk  
5 releasing -- doing any samples on their reactor vessel.  
6 They thought it was a public relations risk and stuff.  
7 Instead of, you know, saying, you know, we want the  
8 honest truth.

9 We want all fundamental aspects of what  
10 we're going out there in front of us. We want nothing  
11 hidden. We want to see it all and then, you know, we  
12 trust people to make the right decisions and stuff like  
13 that.

14 It's only certain segments of a bureaucracy  
15 decide on their own that hey, this is not good. I'm  
16 going to hide this information and the rest of the  
17 bureaucracy doesn't see that. That's when we lose  
18 faith in the institution and all that sort of stuff.

19 So, like I said, the specimens are  
20 important. I'd like to, as far as to get some of the  
21 most vulnerable plants. I know there's 31 that have  
22 these forgings as Belgium. I think, or is it 61? In  
23 that document.

24 And so, there's a vulnerability of these  
25 having these metallic flakes in the United States fleet.

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1 And so, that specimen, collect a specimen and a quick  
2 ultrasonic test of one of these dead vessels to make --  
3 too just, you know with a high ability to detect flaws.

4 Probably much higher than we're currently  
5 doing now. Similar to the Belgium regulatory agency.  
6 And if we get nervous finding flaws, then I'd like to,  
7 you know, I think that proper thing to do is start  
8 testing vulnerable reactors on a, you know, within six  
9 months type of thing.

10 Again, I'd like to thank you for attending  
11 this opportunity to speak. Thank you. I'm all done.

12 CHAIRMAN TAYLOR: Mr. Mulligan, this is  
13 Rob Taylor. Thank you for taking the time and providing  
14 those additional perspectives and thoughts for our  
15 consideration.

16 So at this time what I want to do is ask if  
17 there are any questions from staff here at Headquarters  
18 or our office enforcement representative who's on the  
19 phone, for Mr. Mulligan?

20 MR. CARPENTER: Yes, this is Rob  
21 Carpenter. I was going to say -- this is Rob Carpenter.  
22 I don't have any comments. But thanks Mr. Mulligan.

23 MR. MULLIGAN: Thank you. Thank you for  
24 being here.

25 CHAIRMAN TAYLOR: Let me ask now, if the

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1 representatives from Region I and Region III have any  
2 questions for Mr. Mulligan?

3 MR. HAMMANN: No questions from Region I.

4 MR. MEGHANI: No questions from Region  
5 III.

6 CHAIRMAN TAYLOR: Thank you, Regions.  
7 Lastly, I would like to ask if the Licensee  
8 representative has any questions for Mr. Mulligan?

9 MR. CARPENTER: No questions.

10 CHAIRMAN TAYLOR: Thank you. With that,  
11 Mr. Mulligan, the NRC would like to express its  
12 appreciation for you taking the time to engage in the  
13 2.206 process. And for taking the time today to provide  
14 additional perspective and clarification on your  
15 Petition.

16 We will move forward with our process and  
17 evaluating your Petition to determine whether we need  
18 to take any action.

19 With that I would like to ask the Court  
20 Reporter if there is any additional information that you  
21 need for the transcript?

22 COURT REPORTER: Yes. I was actually  
23 wondering if I could get some spellings for a few of the  
24 names of the participants on the call?

25 CHAIRMAN TAYLOR: Of course.

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1 COURT REPORTER: First, is it Ms. Khanna or  
2 Connley? The Branch Chief of Operating Rental Agency?  
3 Could you possibly spell your name?

4 MS. KHANNA: I'll provide you, but we can  
5 do this offline if you'd like. I think we'll be happy  
6 to get in touch with you if you'd like to do that.

7 CHAIRMAN TAYLOR: Is that acceptable?  
8 We'll get you the spellings of all the participants.

9 COURT REPORTER: Oh, yes. That would be  
10 very helpful.

11 CHAIRMAN TAYLOR: Okay.

12 COURT REPORTER: Aside from that, I only  
13 had one question that was a technical term. Was it  
14 potting damage or clotting damage?

15 CHAIRMAN TAYLOR: Cladding.

16 COURT REPORTER: Cladding damage. All  
17 right, great. Okay, that was the only question aside  
18 from the participants' names spellings.

19 CHAIRMAN TAYLOR: Okay. Well, we'll  
20 reach out offline to get you those spellings.

21 COURT REPORTER: Excellent. Thank you.

22 CHAIRMAN TAYLOR: Thank you for your time  
23 today. So with that, I'd like --

24 MR. MULLIGAN: Thank you.

25 CHAIRMAN TAYLOR: I'm sorry?

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1 MR. MULLIGAN: Thank you.

2 CHAIRMAN TAYLOR: All right. Thank you,  
3 Mr. Mulligan. And we're going to conclude the meeting  
4 now. Take care.

5 (Whereupon, the above-entitled matter went  
6 off the record at 2:48 p.m.)

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