## Official Transcript of Proceedings NUCLEAR REGULATORY COMMISSION

Title: 10 CFR 2.206 Petition Review Board (PRB)

Re: Three Mile Island Nuclear Station, Unit 1

Docket Number: N/A

Location: Teleconference

Date: June 26, 2019

Work Order No.: NRC-0413 Pages 1-37

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| 1  | UNITED STATES OF AMERICA                        |
| 2  | NUCLEAR REGULATORY COMMISSION                   |
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| 4  | 10 CFR 2.206 PETITION REVIEW BOARD (PRB)        |
| 5  | HEARING   |
| 6  | RE  |
| 7  | THREE MILE ISLAND NUCLEAR STATION, UNIT 1       |
| 8  | + + + +   |
| 9  | WEDNESDAY                                       |
| 10 | JUNE 26, 2019                                   |
| 11 | + + + +   |
| 12 | The hearing was held at 1:00 p.m. via           |
| 13 | teleconference, Brian Smith, Chairperson of the |
| 14 | Petition Review Board, presiding.               |
| 15 |   |
| 16 | PETITIONER: ERIC EPSTEIN, Chairman              |
| 17 | SCOTT D. PORTZLINE, Security Consultant         |
| 18 | Three Mile Island Alert                         |
| 19 |   |
| 20 | PETITION REVIEW BOARD MEMBERS                   |
| 21 | BRIAN SMITH, Deputy Director, Division of       |
| 22 | Engineering                                     |
| 23 | Office of Nuclear Reactor Regulation            |
| 24 | JUSTIN POOLE, Petition Manager                  |
| 25 | Office of Nuclear Reactor Regulation            |
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|----|---------------------------------------|---|
| 1  | PERRY BUCKBERG, Petition Coordinator  |   |
| 2  | Office of Nuclear Reactor Regulation  |   |
| 3  | CHERYL KAHN, Senior Project Engineer  |   |
| 4  | Region I                              |   |
| 5  | ANDREW JOHNSON, Materials Engineer    |   |
| 6  | Office of Nuclear Reactor Regulation  |   |
| 7  | PAUL KLEIN, Senior Materials Engineer |   |
| 8  | Office of Nuclear Reactor Regulation  |   |
| 9  | JOE GILLESPIE, Attorney               |   |
| 10 | Office of General Counsel             |   |
| 11 | ALAN HUYNH, Materials Engineer        |   |
| 12 | Office of Nuclear Reactor Regulation  |   |
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| 1  | PROCEEDINGS   |
|----|---|
| 2  | 1:00 p.m.   |
| 3  | MR. POOLE: Hi, this is Justin Poole from              |
| 4  | the NRC. It is 1:00 p.m. Mr. Portzline, are you on    |
| 5  | the line?   |
| 6  | MR. PORTZLINE: Yes, I am.                             |
| 7  | MR. POOLE: And Mr. Epstein, are you on                |
| 8  | the line?   |
| 9  | MR. EPSTEIN: Yes.                                     |
| 10 | MR. POOLE: Okay, then we will get                     |
| 11 | started. I'd like to thank everybody for attending    |
| 12 | the meeting today.                                    |
| 13 | My name is Justin Poole, I am a Project               |
| 14 | Manager in the Division of Operator Reactor Licensing |
| 15 | in the Office of Nuclear Reactor Regulation. I'm also |
| 16 | the petition manager for this petition.               |
| 17 | We're here today to allow the Petitioner,             |
| 18 | TMI Alert, to address the Petition Review Board       |
| 19 | regarding the 2.206 petition dated March 11, 2019.    |
| 20 | The Petition Review Board Chairman is                 |
| 21 | Brian Smith, Deputy Director in the Division of       |
| 22 | Engineering in the Office of Nuclear Reactor          |
| 23 | Regulation.   |
| 24 | This is a Category 1 Meeting, the public              |
| 25 | is invited to observe this meeting and we'll have one |
|    |   |

1 or more opportunities to communicate with the NRC 2 after the business portion but before the meeting is 3 adjourned. 4 I ask that you please silence your cell 5 phones at this time so as to not interrupt the meeting or any of its speakers. 6 7 As part of the Petition Review Board's review of this petition, TMI Alert has requested this 8 9 opportunity to address the PRB, that is the Petition Review Board. 10 11 This meeting was scheduled to begin at 12 1:00 p.m. Eastern Time and introductory remarks we'll allow TMI Alert approximately 35 minutes to address 13 14 the Board. The meeting is being recorded by the NRC Operations Center and will be transcribed by a court 15 16 reporter. The transcript will become a supplement to 17 the petition and the transcript will also be made 18 19 publicly available. I'd like to open the meeting with introductions. 2.0 21 As I stated, the PRB Chair is Brian Smith. 22 I would like to the rest of the Petition Review Board 23 here at NRC Headquarters and one individual calling in to introduce themselves, first here at Headquarters 24

and then on the phone.

| 1  | Please be sure to clearly state your name,             |
|----|--|
| 2  | your position, and the office that you work for within |
| 3  | the NRC for the record.                                |
| 4  | Again, my name is Justin Poole, I am a                 |
| 5  | Project Manager in the Division of Operator Reactor    |
| 6  | Licensing in the Office of Nuclear Reactor Regulation. |
| 7  | MR. BUCKBERG: I am Perry Buckberg, I am                |
| 8  | the NRC's Agency 2.206 Petition Coordinator.           |
| 9  | MR. HUYNH: I'm Alan Huynh.                             |
| 10 | (Simultaneous Speaking.)                               |
| 11 | MR. POOLE: Go ahead.                                   |
| 12 | MR. EPSTEIN: No, I'm listening. I didn't               |
| 13 | hear the gentleman's first name.                       |
| 14 | MR. BUCKBERG: Perry or Alan.                           |
| 15 | MR. EPSTEIN: How do you spell your last                |
| 16 | name? You know what, it will be on the record so go    |
| 17 | ahead.   |
| 18 | MR. POOLE: Go ahead.                                   |
| 19 | MR. HUYNH: This is Alan Huynh, I'm a                   |
| 20 | Materials Engineer, Division of Materials and License  |
| 21 | Renewal.   |
| 22 | MR. SMITH: This is Brian Smith, I am the               |
| 23 | Deputy Director of the Division of Engineering in the  |
| 24 | Office of Nuclear Reactor Regulation.                  |
| 25 | MR. KLEIN: I'm Paul Klein, I'm a Senior                |

| 1  | Materials Engineer in the Division of Materials and  |
|----|--|
| 2  | License Renewal.   |
| 3  | MR. GILLESPIE: Joe Gillespie, I am an  |
| 4  | attorney in the Office of General Counsel, Division of   |
| 5  | Materials, Litigation, and Enforcement.  |
| 6  | MR. JOHNSON: Andrew Johnson, Materials   |
| 7  | Engineer, Division of Materials and License Renewal.   |
| 8  | MR. POOLE: And there's one other Member  |
| 9  | in Headquarters here that's on the Board. His name is  |
| 10 | David Jones from the Office of Enforcement. He was   |
| 11 | not able to attend the meeting today.  |
| 12 | Cheryl, can you go to your introduction?   |
| 13 | MS. KAHN: Sure. This Is Cheryl Kahn, I'm   |
| 14 | a Senior Project Engineer with the Division of Reactor   |
| 15 | Projects in the Region I Office.   |
| 16 | MR. POOLE: Okay, are there any   |
| 17 | representatives from the licensee on the phone?  |
| 18 | MR. MASCITELLI: Frank Mascitelli from  |
| 19 | Corporate Licensing.   |
| 20 | MR. GOLDMAN: Also with TMI, Jeff Goldman,  |
| 21 | Regulatory Assurance Manager.  |
| 22 | MR. WUNDERLY: Blair Wunderly, Engineering  |
| 23 | Director, TMI.   |
| 24 | MR. FITZWATER: Mike Fitzwater with   |
| 25 | Regulatory Assurance.  |
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| 1  | MR. POOLE: And TMI Alert, would you                  |
|----|--|
| 2  | please introduce yourselves for the record?          |
| 3  | MR. EPSTEIN: Eric Epstein, Chairman of               |
| 4  | the Three Mile Island Alert.                         |
| 5  | MR. PORTZLINE: Scott Portzline. I do a               |
| 6  | lot of work on security and safety.                  |
| 7  | MR. POOLE: Okay, and are there any                   |
| 8  | members of the public not directly involved in this  |
| 9  | petition on the line? Okay.                          |
| LO | I'd like to emphasize that we each need to           |
| L1 | speak clearly and loudly to make sure the court      |
| L2 | reporter can accurately transcribe the meeting.      |
| L3 | If you do have something that you would              |
| L4 | like to say, please first state your name for the    |
| L5 | record. For those dialing into the meeting, please   |
| L6 | remember to mute your phones to minimize any         |
| L7 | background noises or distractions.                   |
| L8 | If you don't have a mute button this can             |
| L9 | be done by pressing star 6. At this time, I'll turn  |
| 20 | it over to the Petition Review Board Chairman, Brian |
| 21 | Smith.   |
| 22 | MR. SMITH: Welcome to this meeting                   |
| 23 | regarding the 2.206 petition submitted by TMI Alert. |
| 24 | I'd like to first share some background on our       |
| 25 | process.   |

1 Section 2.206 of Title 10 of the Code of 2 Federal Regulations describes the petition process, 3 the primary mechanism for the public to request 4 enforcement action by the NRC, a public process. 5 This process permits anyone to petition the NRC to take enforcement-type action related to NRC 6 7 licensees or licensed activities. 8 Depending on the results of its 9 evaluation, the NRC can modify, suspend, or revoke an NRC-issued license or take any other appropriate 10 11 enforcement action to resolve a problem. 12 The Staff's quidance NRC for the petition request is disposition of 2.206 13 14 Management Directive 8.11, which is publicly 15 available. The purpose of today's meeting is to give 16 the Petitioner an opportunity to provide any relevant 17 additional explanation and support for the petition 18 19 after having received the Petition Review Board's 20 initial assessment. 21 This meeting is not a hearing, nor is it 22 an opportunity for the Petitioner or other members of 23 the public to question or examine the Petition Review 24 Board on the merits or the issues presented in the

petition request.

1 No decisions regarding the merits of this 2 petition will be made at this meeting. Following this 3 meeting the Petition Review Board will conduct its 4 initial deliberations. The outcome of this internal 5 meeting will be discussed with the Petitioner. Petition Review Board typically 6 The 7 consists of a Chairman, usually a manager at the Senior Executive Service level at the NRC. 8 9 petition manager and a PRB coordinator. Other Members of the Board are determined 10 by the NRC Staff based on the content of the 11 12 information in the petition request. The Members have already introduced themselves. 13 14 As described in our process, the NRC Staff may ask clarifying questions in order to better 15 understand the Petitioner's presentation and to reach 16 a reasoned decision on whether or not to accept the 17 Petitioner's request for review under the 2.206 18 19 process. 20 I would like to summarize the scope of the 21 petition under consideration and the NRC activities to 22 date. On March 11, 2019 you submitted to the NRC 23 24 a petition under 2.206 regarding concerns about the

design of the replacement steam generators at Three

1 Mile Island Nuclear Station, Unit 1. 2 Specifically, you state that the analysis 3 and testing used to confirm the design of the steam 4 generators was insufficient when it came to 5 identifying steam tube fluttering, causing tube-to-6 tube wear. 7 And due to this, TMI is in violation of 10 8 C.F.R. 50.59 and the plant appears to be at 9 significant increased risk of an accident. 10 Due your concerns, your petition requests enforcement action including shutting down 11 12 the reactor until the problem is properly evaluated and remediated. 13 14 On June 5, 2019 the petition manager 15 contacted you to inform you of the PRB's initial 16 assessment that your petition does not meet Management Directive 8.11, Section III.C.1 criteria for petition 17 evaluation because the NRC has been aware of and has 18 19 been involved with the issues raised in your petition 20 since 2011. 21 Documents that you referred to in your 22 petition as well as other publicly available documents 23 reflect the NRC's Staff detailed knowledge of the

tube-to-tube wear issues and the NRC Staff's position.

The petition manager offered you

24

1 opportunity --2 MR. EPSTEIN: Can you repeat sentence, the one where you said you had detailed 3 4 knowledge? What was that sentence that you were 5 reading? I couldn't get that. 6 7 MR. SMITH: Okay, I'll repeat that 8 sentence. Documents that you referred to in your 9 petition as well as other publicly available documents 10 11 reflect the NRC's Staff detailed knowledge of the 12 tube-to-tube wear issues and the NRC Staff's position. The petition offered you 13 manager 14 opportunity to address the PRB to clarify 15 petition supplement your in response this to 16 assessment and you requested to address the PRB via teleconference. 17 As a reminder for the phone participants, 18 19 please identify yourself if you make any remarks as 20 this will help us in the preparation of the meeting 21 transcript that will be made publicly available. 22 Thank you. 23 Mr. Epstein and Mr. Portzline, I will turn 24 it over to you now to allow you the opportunity to

provide any information you believe the PRB should

1 consider as part of this petition. You have 35 2 minutes for your presentation. 3 MR. PORTZLINE: Eric, I'd like to say 4 something first. I'm reading the same paragraph that 5 you were questioning and I couldn't hear the wording 6 quite right. 7 The Petition Review Board refers detailed knowledge in the documents that we had 8 9 examined from the licensee or the NRC, or from Areva. 10 And so what we want to know is, although you claim to be very familiar with that, nowhere in 11 12 these documents is there any point about the exact problem that we are describing, which is the secondary 13 14 flow between the steam tubes that has buckled and are 15 now in a different geometry than has ever been 16 analyzed. 17 The analysis process used by Areva could not detect that the fluttering was going to occur and 18 19 so I'm questioning how the Review Board could state 20 that we got detailed knowledge of this and there's 21 nothing new here. 22 But there is something new, because I have 23 never seen any documents discussing the fluttering and 24 what would happen during even higher temperatures and

pressures.

| 1  | So, I'd like to ask you about that.                    |
|----|--|
| 2  | MR. BUCKBERG: Hi, this is Perry Buckberg,              |
| 3  | the Agency Petition Coordinator. Sticking to the       |
| 4  | guidelines of this meeting, we will not answer         |
| 5  | questions regarding the contents of the petition.      |
| 6  | This is your opportunity to supplement the             |
| 7  | petition but we have noted your question and it's      |
| 8  | something we'll consider afterwards.                   |
| 9  | MR. PORTZLINE: Well, in your statement                 |
| 10 | you refer to detailed documents so you opened the door |
| 11 | to it, not us.   |
| 12 | If you say, oh, it's all in the detailed               |
| 13 | documents and then we ask you where, tell us what it   |
| 14 | is? And you say, oh, no we can't refer to that         |
| 15 | anymore.   |
| 16 | Well, you opened that door, not me.                    |
| 17 | MR. BUCKBERG: That statement was of the                |
| 18 | PRB's current position and considering that statement, |
| 19 | which was information relayed to you in the June 5th   |
| 20 | email, you can take this opportunity to supplement the |
| 21 | petition or respond to what our position is.           |
| 22 | But this is not an opportunity for a back              |
| 23 | and forth type of a hearing. This is your time to      |
| 24 | supplement.  |
| 25 | MR. PORTZLINE: It doesn't matter what we               |

1 would supplement because it's already been decided 2 through legal --3 (Simultaneous Speaking.) 4 MR. SMITH: All right, I'm not sure if it 5 was Mr. Portzline or Mr. Epstein that was asking the question but this is Brian Smith. 6 7 Just in а general response your 8 question about the documents that may be publicly 9 available, there have been several inspections that have been conducted by the NRC where they have looked 10 11 into these issues. 12 So, there publicly available are inspection reports that document those reviews and 13 14 there are other reviews that were conducted by folks 15 here at Headquarters as well as some meeting summaries 16 from public meetings that were conducted as well on 17 related topics. And those are the documents that we're 18 19 referring to. 20 MR. PORTZLINE: And Brian, I have scoured 21 those for years and everything I could get my hands on 22 is publicly available, and nowhere in those documents 23 does it talk about what would happen under transient 24 conditions to the increased bowing that can occur

because of the temperature differences between the

1 shell and so forth. 2 So, when you give me that answer, you are 3 incorrect, there's no reference to that. If you're 4 resting on what those documents say, you're wrong, 5 they don't say that. There's no analysis there and that's why 6 7 we're questioning the Petition Review Board. 8 a perfect point, you've got to be able to stand up and 9 say we really did analyze that and you're not, you're 10 not able to say that. Okay, we understand your 11 MR. SMITH: 12 comment and we will consider that as we further our deliberations. 13 14 MR. EPSTEIN: This is Eric Epstein from 15 Three Mile Island Alert. I have drafted our presentation and I'll 16 send it to share with you but I did want to ask or 17 make some requests, if you can tell me if they're 18 19 appropriate or inappropriate, which would actually 20 help us respond. I've got to tell you, it's difficult to 21 22 respond because the information we received from the 23 PRB was sparse, it was a cursory dismissal. I've been litigating for 30 years and I've never had 24

experience like this.

| 1  | But I don't know if you can provide it,                |
|----|--|
| 2  | what would be interesting if you could confirm is it's |
| 3  | my understanding that you had two meetings previous to |
| 4  | this.  |
| 5  | Is that correct?                                       |
| 6  | MR. POOLE: Who had two meetings? Sorry,                |
| 7  | this is Justin Poole.                                  |
| 8  | MR. EPSTEIN: The NRC.                                  |
| 9  | MR. PORTZLINE: The Petition Review Board.              |
| 10 | MR. POOLE: We have met internally a few                |
| 11 | times, yes.  |
| 12 | MR. EPSTEIN: I mean when you say a few                 |
| 13 | times, again, this is kind of oblique. Did you meet    |
| 14 | once, twice? I'm just trying to determine how many     |
| 15 | times you guys have met before you drafted a decision. |
| 16 | MR. POOLE: I would have to look at a                   |
| 17 | calendar but my guess would be at least three or four  |
| 18 | times.   |
| 19 | MR. EPSTEIN: Okay, do you have minutes to              |
| 20 | those meetings?  |
| 21 | MR. POOLE: We do not, no.                              |
| 22 | MR. BUCKBERG: Those are internal closed                |
| 23 | meetings.  |
| 24 | MR. EPSTEIN: Are you allowed to disclose               |
| 25 | who attended the meetings?                             |

| 1  | MR. BUCKBERG: No.                                      |
|----|--|
| 2  | MR. POOLE: It's the Members of the PRB                 |
| 3  | that we said here today.                               |
| 4  | MR. EPSTEIN: Right, but that doesn't mean              |
| 5  | that everybody attended every meeting.                 |
| 6  | So, if we have three or four meetings,                 |
| 7  | what I'm trying to drill down and find out is who      |
| 8  | attended the meetings, who missed the meetings?        |
| 9  | Frankly, I haven't seen anybody resumes.               |
| 10 | Are you able to acknowledge if anybody has prior steam |
| 11 | generator experience?                                  |
| 12 | MR. SMITH: Yes, this is Brian Smith.                   |
| 13 | What I mentioned in my presentation before             |
| 14 | about the selection of the PRB Members based upon the  |
| 15 | content of the petition, basically that means what is  |
| 16 | the topic of the petition?                             |
| 17 | In this case it's steam generators and so              |
| 18 | when we selected the Members to be on the Petition     |
| 19 | Review Board, we selected those Staff that had         |
| 20 | experience with steam generators.                      |
| 21 | MR. EPSTEIN: Okay, Brian, that answers my              |
| 22 | question. I'm wondering as a follow-up to that         |
| 23 | question, you generally refer to having knowledge and  |
| 24 | experience. Do you have any documents?                 |
| 25 | I'm a professor normally, when I review a              |

1 student's graduate or undergraduate research, it's 2 Can you provide us a footnote or documented. 3 annotated bibliography of what documents you're 4 referring to? 5 MR. SMITH: As we follow through in the process and if we continue through with the position 6 7 that we have now, you would receive documentation from us that would include references to some of those 8 9 documents. MR. EPSTEIN: Right, but it puts us at a 10 disadvantage when you make a decision without 11 12 substantiating the premise for your decisions. So, basically, you can basically -- the 13 14 initial review is dismissal but in order for us to 15 respond to your argument, I need to know what I'm 16 arquing against. I need to know what I'm referring 17 to. There is no meter on the phones here so 18 19 what I'm saying, moving forward that's great but down 20 to the facts prior to that, are you allowed to share 21 with us the documents you referenced to make your 22 initial decision? 23 It's a real simple question, yes or no. 24 MR. BUCKBERG: No. 25 MR. EPSTEIN: So, basically, just so that

| 1  | I understand, you had a meeting that the public was    |
|----|--|
| 2  | not invited to, we're not really sure who attended it, |
| 3  | the decision is based on documents you can't share.    |
| 4  | Is that a fair characterization?                       |
| 5  | MR. BUCKBERG: This is Perry Buckberg.                  |
| 6  | I'll be more general, we are following the             |
| 7  | MD 8.11 petition process which you submitted your      |
| 8  | petition under and there's no call for a meeting open  |
| 9  | to the prescribe or to be transcribed or anything when |
| 10 | it's an internal PRB meeting.                          |
| 11 | This is the first public meeting while                 |
| 12 | following that process.                                |
| 13 | MR. EPSTEIN: Right, but you had                        |
| 14 | gatherings that informed you to make the decision. If  |
| 15 | you can't tell us who was in the meeting, I was        |
| 16 | wondering if you could tell us what was utilized to    |
| 17 | come to a conclusion?                                  |
| 18 | We're kind of in an Alice-in-Wonderland                |
| 19 | place here. If you can't tell me, you can't tell me.   |
| 20 | I just need to know.                                   |
| 21 | After I go get this and respond, it would              |
| 22 | be great to have a footnoted annotated bibliography to |
| 23 | know what you're basing your decision on.              |
| 24 | MR. BUCKBERG: We're going to go on mute                |
| 25 | for a minute here since you haven't begun your         |

| 1  | presentation yet.                                     |
|----|---|
| 2  | MR. EPSTEIN: What?                                    |
| 3  | MR. BUCKBERG: We're going to go on mute               |
| 4  | and discuss this for a brief moment.                  |
| 5  | MR. EPSTEIN: All right, do you need to                |
| 6  | mute the sound?                                       |
| 7  | MR. SMITH: Just hold on for a minute if               |
| 8  | you would. Give us a chance to talk privately.        |
| 9  | (Whereupon, the above-entitled matter                 |
| 10 | went off the record at 1:20 p.m. and                  |
| 11 | resumed at 1:21 p.m.)                                 |
| 12 | MR. BUCKBERG: Thank you for your                      |
| 13 | patience. We just wanted to make sure we were on the  |
| 14 | same page here as far as the procedure goes.          |
| 15 | Where we were when this meeting began was             |
| 16 | the Petition Chair ended his comments at 1:10 p.m.    |
| 17 | giving the Petitioners 35 minutes to present, to      |
| 18 | supplement. And we're taking up a few of those        |
| 19 | minutes right now.                                    |
| 20 | If there's no presentation or supplement              |
| 21 | that you want to offer, we can move to adjourn the    |
| 22 | meeting or you can take the rest of your time to make |
| 23 | that presentation.                                    |
| 24 | But we're going to go back to the process             |
| 25 | where this is not a back and forth and this is not an |

| 1  | opportunity to question the PRB. The petition process  |
|----|--|
| 2  |  |
| 3  | (Simultaneous Speaking.)                               |
| 4  | is how it's spelled out in MD 8.11 and                 |
| 5  | we're sticking closely to the process.                 |
| 6  | MR. EPSTEIN: In order for me to                        |
| 7  | substantiate a response, I need the documents and      |
| 8  | please give us three minutes credit because we should  |
| 9  | not be timed for the time that you took.               |
| LO | Let me just say this to you and you can                |
| L1 | not respond, but I think this is the crux of the case. |
| L2 | During your deliberations was Exelon consulted?        |
| L3 | MR. POOLE: No.   |
| L4 | MR. EPSTEIN: All right.                                |
| L5 | I think moving forward I'm going to send               |
| L6 | you documents and we're kind of in a never-world here  |
| L7 | because in order for us to supplant the supplement,    |
| L8 | what we're doing, it's difficult to understand what    |
| L9 | detailed knowledge is about documentation or to        |
| 20 | understand what research you relied on.                |
| 21 | Can I ask if you've met with the                       |
| 22 | manufacturer, Areva, during your deliberations?        |
| 23 | MR. SMITH: No, we did not.                             |
| 24 | MR. EPSTEIN: So, as part of the public                 |
| 25 | record, this was an internal deliberate process that   |

1 was conducted without the manufacturer and without the 2 licensee, is that correct? MR. BUCKBERG: Correct, in accordance with 3 4 Management Directive 8.11. These were internal NRC 5 meetings. MR. EPSTEIN: All right. 6 7 I'd just like for the record to also point out that you have not as part of your initial denial 8 9 provided any documentation that would disprove our contentions concerning the fact that we believe that 10 steam generators can self-destruct with excessive 11 12 vibration and fluttering under reactor-transient conditions. 13 14 again, our position remains 15 fluttering can be so severe that the steam generator 16 tubes within the generator can bang into each other 17 and rupture. And again, as we argued, this triggering mechanism can formally induce steam generator tube 18 failure. 19 20 I'm probably going to request the same 21 information, I don't know if you can give it, 22 provide any documentation you'll have to 23 disproves that theory. Basically, have you disproved 24 the theory? 25 I working within know we're the

| 1  | limitations of the petition process but we haven't     |
|----|--|
| 2  | received anything to disprove the theory. Did you      |
| 3  | send that to us?                                       |
| 4  | MR. POOLE: No.   |
| 5  | MR. EPSTEIN: All right. Were you able to               |
| 6  | verify that Exelon address of the design did not       |
| 7  | decrease safety margins? Because I didn't receive      |
| 8  | that either.   |
| 9  | MR. SMITH: We did not provide that to                  |
| 10 | you, no.   |
| 11 | MR. EPSTEIN: Let me just get to the final              |
| 12 | question, which is we asserted that some of the steam  |
| 13 | tubes at TMI have exhibited excessive wear and I think |
| 14 | you've acknowledged receipt of that.                   |
| 15 | And our feeling is that the behavior under             |
| 16 | normal temperatures, especially what we saw in the     |
| 17 | first 22 months of operation, would have a damaging    |
| 18 | impact and potentially destroy the radiation barrier.  |
| 19 | I didn't receive anything disproving that              |
| 20 | theory, did you supply that to us as well?             |
| 21 | MR. SMITH: No, we did not.                             |
| 22 | MR. EPSTEIN: All right, were you at all                |
| 23 | aware of prior steam generator issues that occurred    |
| 24 | while 29,000 steam generators through the use of       |
| 25 | thiosulfate were damaged between November '81 and '82? |

| 1  | Were you aware of this and did this factor           |
|----|--|
| 2  | into your decision-making?                           |
| 3  | MR. SMITH: We're going beyond the                    |
| 4  | petition here and as Perry has pointed out several   |
| 5  | times, the purpose of this meeting wasn't really     |
| 6  | intended to be a back and forth and a questioning of |
| 7  | the Petition Review Board.                           |
| 8  | And so I'm going to have to ask you to               |
| 9  | stop asking questions. And if you want to make a     |
| 10 | presentation   |
| 11 | (Simultaneous Speaking.)                             |
| 12 | MR. PORTZLINE: I do have a question.                 |
| 13 | MR. EPSTEIN: Go ahead, Scott, I'm sorry.             |
| 14 | MR. PORTZLINE: Did the Review Board base             |
| 15 | this decision or make this decision on technical     |
| 16 | matter or on purview qualification matter?           |
| 17 | MR. POOLE: Can you explain that last one?            |
| 18 | MR. PORTZLINE: Well, I got an email from             |
| 19 | Justin Poole and it says that the petition falls     |
| 20 | within one of the following categories, the issue    |
| 21 | raised by the Petitioner has not previously been a   |
| 22 | subject of a facilities-restricted or generic NRC    |
| 23 | Staff review.  |
| 24 | And therefore, it doesn't fall within your           |
| 25 | criteria to be accepted for review. So, that's what  |

1 I'm asking. 2 Has the Review Board made the decision that its currently standing by on technical matters or 3 4 on the purview qualification matter? 5 MR. BUCKBERG: I don't think we understand the question. 6 7 MR. EPSTEIN: This is Eric. The question is this and it gets to the heart of the problem. 8 9 Was the petition initially dismissed based on the merits or based on a technical flaw that we 10 11 somehow didn't follow the ABCs of the process? What we're trying to determine is has the 12 content of the petition actually been examined or has 13 14 it been dismissed due to procedural error? 15 No, it was not a procedural MR. SMITH: 16 error on your part. As I said in my opening remarks, I said that we wanted to -- let's see, I'll read the 17 18 sentence over again. 19 On June 5, 2019, the petition manager 20 contacted you to inform you of the PRB's initial 21 assessment that your petition does not meet Management 22 Directive 8.11, Section III.C.1 criteria for petition evaluation because the NRC has been aware of and has 23 24 been involved with the issues raised in your petition

since 2011.

| 1  | MR. PORTZLINE: So, you're saying that you              |
|----|--|
| 2  | would make your decision on purview qualification or   |
| 3  | criteria merit? Is that right?                         |
| 4  | MR. KLEIN: We obviously looked at the                  |
| 5  | technical merit so                                     |
| 6  | (Simultaneous Speaking.)                               |
| 7  | MR. PORTZLINE: In other words, no matter               |
| 8  | what we technically, you're saying it doesn't fit      |
| 9  | your criteria?   |
| LO | MR. SMITH: So, to clarify, it's probably               |
| L1 | a combination of both of those.                        |
| L2 | The fact that we were involved and aware               |
| L3 | of the issues since 2011, we were involved in a        |
| L4 | technical manner in that aspects of it were reviewed   |
| L5 | during inspection and aspects of it were reviewed from |
| L6 | a Headquarters perspective as well.                    |
| L7 | MR. PORTZLINE: And we're saying that the               |
| L8 | Review Board did not review or look at any documents   |
| L9 | that had to do with the secondary flow causing the     |
| 20 | fluttering during the transient conditions. There's    |
| 21 | no document about that anywhere.                       |
| 22 | So, the fact that it's the same thing that             |
| 23 | Eric's been asking, how can we have a good discussion  |
| 24 | about the process when you haven't even looked at the  |
| 25 | details?   |

| 1  | MR. BUCKBERG: Are you declining your                   |
|----|--|
| 2  | opportunity to supplement right now?                   |
| 3  | MR. PORTZLINE: No. All right, look,                    |
| 4  | you're getting so legalistic it's just a waste of our  |
| 5  | time.  |
| 6  | If this is a legalistic discussion and we              |
| 7  | can't even involve details, although you've opened the |
| 8  | door to them too, I feel I'm wasting my time with what |
| 9  | you're doing. You're really legally obstructing        |
| 10 | safety.  |
| 11 | So, if a citizen or a citizen's group sees             |
| 12 | or believes that there's a safety problem and I've     |
| 13 | presented it to many different people within the       |
| 14 | industry and the Nuclear Regulatory Commission         |
| 15 | specifically, what process is available to me to have  |
| 16 | it addressed?  |
| 17 | MR. SMITH: It's this process.                          |
| 18 | MR. PORTZLINE: But you didn't test it.                 |
| 19 | You just decided you don't want it, you don't want to  |
| 20 | look at it and you claim you did. In a technical       |
| 21 | manner also, is what you said.                         |
| 22 | (Simultaneous Speaking.)                               |
| 23 | MR. SMITH: So, part of this, part of the               |
| 24 | purpose of this meeting is for you to provide more     |
| 25 | information to us, clarification to us.                |

| 1  | So, in a way, you're telling us we focused            |
|----|---|
| 2  | on the wrong issue and that we now need to go off and |
| 3  | focus on the issue that you're raising. So, that's    |
| 4  | part of   |
| 5  | MR. PORTZLINE: I didn't say that. I                   |
| 6  | don't know how you're getting that.                   |
| 7  | MR. SMITH: Well, you're saying that we                |
| 8  | didn't evaluate the technical aspects of the tube-to- |
| 9  | tube rubbing as well as the flow that could cause     |
| 10 | problems.   |
| 11 | You're saying that we haven't evaluated               |
| 12 | that, right?  |
| 13 | MR. PORTZLINE: The rubbing is caused by               |
| 14 | the flow and the fact is that these things have flows |
| 15 | or have buckled and so they don't flutter until       |
| 16 | there's flow of water through the secondary system.   |
| 17 | You didn't study it under reactor-                    |
| 18 | transient conditions. That's nothing new but you      |
| 19 | still haven't substantiated that.                     |
| 20 | And so what I'm saying to you is I'm going            |
| 21 | to be sure the Congressmen know about this because I  |
| 22 | hear these reports from the Nuclear Regulatory        |
| 23 | Commission, how you have all these channels for       |
| 24 | citizens to go through and then this is what happens. |
| 25 | And I had one other issue in the past                 |

| 1  | this is off topic so I'm going to make it short and    |
|----|--|
| 2  | I'll stop with the petition for entrance guards, G-    |
| 3  | U-A-R-D-S, at nuclear plants.                          |
| 4  | 45 occasions the NRC broke their own                   |
| 5  | guidelines and rules and ultimately didn't even issue  |
| 6  | a decision, which was against the regulations. So, I   |
| 7  | know what to expect from you guys and you ought to be  |
| 8  | embarrassed.   |
| 9  | MR. EPSTEIN: This is Eric. Let me just                 |
| LO | say that we will what's the timeline for submitting    |
| L1 | additional information?                                |
| L2 | MR. POOLE: The timeline was today. That                |
| L3 | was the point of the meeting today. This is Justin     |
| L4 | Poole.   |
| L5 | MR. EPSTEIN: But for us the point of the               |
| L6 | meeting was to understand how the decision was denied  |
| L7 | and basically, we're chasing our tails.                |
| L8 | I've never been involved in a adjudicatory             |
| L9 | process in 30 years where a claim or a concern or a    |
| 20 | contention has been dismissed, and when you ask people |
| 21 | why they tell you that's not how the process works.    |
| 22 | We're simply trying to find out how to                 |
| 23 | cure this issue. As a historian, if a crime is         |
| 24 | committed and you have knowledge, as you say, and you  |
| 25 | have studies it as you say it doesn't mean the crime   |

1 has been solved. It just means you're aware of the 2 problem. 3 We're trying to work with you to defeat 4 the problem because while you may not think it has 5 continuity, we've been through this before. The licensee at the time introduced thiosulfate at least 6 7 half a dozen times and it damaged the tubes. In addition to that, we're trying to be 8 9 proactive because the plant is going to shut and if they're going to soak them, its tubes have damaged the 10 plant, I think the buyer should be aware. 11 12 This is where we're coming from. We're trying to work with you but it's hard to do it when 13 14 we're blindfolded with our hands behind our back. You 15 have not been able to substantiate anything. You're basically just telling us trust us 16 because we're aware and we have knowledge. 17 You're not telling us what that knowledge 18 19 is and our position would be -- and I'll send you the 20 comments this evening, Justin, I'll supply to you what 21 our concerns are. 22 We just don't think a record has been 23 It may have been but you're denying us developed. access to the data. It's kind of frustrating on our 24 25 side.

| 1  | MR. POOLE: Understood.                                 |
|----|--|
| 2  | MR. SMITH: All right, is there a                       |
| 3  | presentation that you'd like to make?                  |
| 4  | MR. EPSTEIN: Well, how much time do we                 |
| 5  | have?  |
| 6  | MR. SMITH: You have another 20 minutes.                |
| 7  | MR. POOLE: Yes.  |
| 8  | MR. EPSTEIN: Well, the presentation was                |
| 9  | contained in our petition and since you didn't respond |
| 10 | to specific concerns, I think there's two frustrations |
| 11 | here.  |
| 12 | One is the design of the process, that                 |
| 13 | it's the end all and bee all but it's not all          |
| 14 | inclusive. It's basically exclusive. It is what it     |
| 15 | is and I don't know what we would have got for         |
| 16 | ourselves after this.                                  |
| 17 | I'm trying to understand when you render               |
| 18 | a final decision, maybe you can walk us through, what  |
| 19 | happens next?  |
| 20 | Is this an appealable decision?                        |
| 21 | MR. BUCKBERG: Yes.                                     |
| 22 | MR. EPSTEIN: Okay, who would we appeal it              |
| 23 | to? I'm just trying to figure out where this goes.     |
| 24 | MR. BUCKBERG: I'm not really sure,                     |
| 25 | probably the Executive Director's office.              |

| 1  | MR. EPSTEIN: All right, well, if you're               |
|----|---|
| 2  | not really sure and you guys are basically            |
| 3  | facilitating this process, that's disturbing. My      |
| 4  | sense is the petition will likely be denied, which is |
| 5  | your right.   |
| 6  | I'm asking you as the Petitioner what is              |
| 7  | my right to readdress? You said there was somebody    |
| 8  | from General Counsel. Can that person answer the      |
| 9  | question?   |
| LO | What is the next legal step?                          |
| L1 | MR. GILLESPIE: I'll say my role here is               |
| L2 | to advise the NRC Staff on this issue, not to provide |
| L3 | legal advice to individuals who are not my clients.   |
| L4 | MR. SMITH: We will get back to you.                   |
| L5 | MR. EPSTEIN: You're not offering advice.              |
| L6 | I'm simply asking you what the next step is, real     |
| L7 | clear. We know where you guys are at. If you're not   |
| L8 | able to or are unwilling to provide the information,  |
| L9 | just tell me so.                                      |
| 20 | MR. SMITH: Mr. Epstein, this is Brian                 |
| 21 | Smith. We will get back to you on any appeal rights   |
| 22 | you have and the process for that.                    |
| 23 | MR. EPSTEIN: All right, so let me ask you             |
| 24 | this. When we get a final decision, will there be any |
| 25 | meat on the bones or will it be simply another        |

1 paragraph? 2 I'm just trying to figure out how this You guys are going to deny the petition, we 3 4 all know what's happening, and then I'm trying to 5 figure out where we appeal. Actually, this is what Scott was getting 6 7 at, where we can discuss the merits of the case. don't know how many people are sitting there on the 8 taxpayer dollar, but I've got to tell you, I'm not 9 feeling like I'm getting a bang for my buck. 10 11 That's a personal decision but if you're 12 going to commit to me to get that information, that would be great. And when will the decision be 13 14 rendered? 15 Is it going to be in the Federal Register or is it going to be another email sent by Justin? 16 It would be a formal letter. 17 MR. POOLE: MR. EPSTEIN: That would be nice. So, as 18 19 we get down to the final part of this, I've got to 20 say, this is really dissatisfying for us. 21 We've been doing this, just so you're 22 think I tried to detail it, I the steam 23 generators, since 1982, almost 40 years. 24 We have experience, we have technical

experts, this was totally unsatisfying, and I'm just

| 1  | telling you guys, I don't know if we can get a         |
|----|--|
| 2  | positive, this is disappointing.                       |
| 3  | We've spent a lot of time, money, and                  |
| 4  | resources to put this together and if this is the best |
| 5  | you can do, I've got to tell you it's pretty sad.      |
| 6  | MR. POOLE: Understood.                                 |
| 7  | MR. EPSTEIN: I hope it is, I hope it is                |
| 8  | because I've been doing it 40 years and I've got to    |
| 9  | tell you, we're almost back to where we were pre-'79.  |
| 10 | Scott, do you have anything else you want              |
| 11 | to add?  |
| 12 | MR. PORTZLINE: No.                                     |
| 13 | MR. EPSTEIN: Well, we'll hang around. I                |
| 14 | don't know if anybody else from the public is going to |
| 15 | comment.   |
| 16 | MR. SMITH: Okay, this is Brian Smith                   |
| 17 | go ahead, Mr. Epstein.                                 |
| 18 | MR. EPSTEIN: No, I'm just wondering if                 |
| 19 | you're going to be done or there's a conclusion.       |
| 20 | MR. SMITH: If you're finished, I have                  |
| 21 | some closing remarks.                                  |
| 22 | MR. EPSTEIN: That would be great.                      |
| 23 | MR. SMITH: Okay, so at this time does the              |
| 24 | Staff or Headquarters have any questions for the       |
| 25 | Petitioners?   |
|    |  |

| 1  | Are there any questions from NRC Staff on              |
|----|--|
| 2  | the phone? Right now it's only the Petition Review     |
| 3  | Board. So, for the licensee, do you have any           |
| 4  | questions?   |
| 5  | MR. MASCITELLI: None from TMI.                         |
| 6  | MR. SMITH: Okay, and just to be sure, did              |
| 7  | any members of the public other than the Petitioners   |
| 8  | join the bridge line? No, okay.                        |
| 9  | So, Mr. Epstein and Mr. Portzline, thank               |
| 10 | you for taking time to provide the NRC Staff with some |
| 11 | clarifying information and your concerns on the        |
| 12 | petition you've submitted.                             |
| 13 | Before we close, does the court reporter               |
| 14 | need any additional information for the meeting        |
| 15 | transcript?  |
| 16 | COURT REPORTER: Yes. Someone on the                    |
| 17 | phone named Mike Fitzwater, it sounded like?           |
| 18 | MR. FITZWATER: That is correct.                        |
| 19 | COURT REPORTER: Could I get the spelling               |
| 20 | of your name, please?                                  |
| 21 | MR. FITZWATER: F-I-T-Z-W-A-T-E-R.                      |
| 22 | COURT REPORTER: I heard a term, it                     |
| 23 | sounded like DPL. Does that sound familiar to anyone?  |
| 24 | MR. FITZWATER: I didn't follow that.                   |
| 25 | COURT REPORTER: That's okay. The name of               |

| 1  | the turbine manufacturer, Areva? Never mind,           |
|----|--|
| 2  | someone's helping me with that. And then I heard a     |
| 3  | chemical   |
| 4  | MR. FITZWATER: A-R-E-V-A.                              |
| 5  | COURT REPORTER: Thank you. And then I                  |
| 6  | heard the name of a chemical, it sounded like TS       |
| 7  | sulfate? That's what I heard.                          |
| 8  | MR. SMITH: Mr. Portzline and Mr. Epstein,              |
| 9  | you mentioned that chemical?                           |
| 10 | COURT REPORTER: Never mind, someone has                |
| 11 | provided it to me.                                     |
| 12 | (Simultaneous Speaking.)                               |
| 13 | MR. EPSTEIN: No, I mentioned thiosulfate.              |
| 14 | Thiosfulate was a sulfur compound introduced by GPU.   |
| 15 | I don't have the spelling handy.                       |
| 16 | MR. POOLE: We got it. One of the Staff                 |
| 17 | provided it. Thank you, though.                        |
| 18 | MR. EPSTEIN: This is Mr. Epstein, I'm                  |
| 19 | just confused. Will the transcript, the whole          |
| 20 | transcript, be available for public inspection?        |
| 21 | MR. POOLE: Yes, it will be.                            |
| 22 | MR. EPSTEIN: And I wanted to thank the                 |
| 23 | NRC. This is the third teleconference I've been in     |
| 24 | and this is the first one where the phone lines worked |
| 25 | so I'm glad you guys finally got that together.        |

| 1  | MR. POOLE: We are too.                              |
|----|---|
| 2  | MR. SMITH: Yes, unfortunately it's a                |
| 3  | somewhat common occurrence. That's being remedied.  |
| 4  | MR. EPSTEIN: It's not a technology                  |
| 5  | confidence-builder.                                 |
| 6  | MR. SMITH: Okay, so with that this                  |
| 7  | meeting is concluded and we will be terminating the |
| 8  | phone connection. Thank you. The meeting is over.   |
| 9  | (Whereupon, the above-entitled matter               |
| 10 | went off the record at 1:41 p.m.)                   |
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