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NUCLEAR REGULATORY COMMISSION

Title:

10 CFR 2.206 Petition RE GE Mark 1 BWRS

Docket Number: (n/a)

Location:

(telephone conference)

Date: Wednesday, June 8, 2011

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NRC-920

Pages 1-74

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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	CONFERENCE CALL
6	RE
7	GE MARK I BWRS
8	+ + + +
9	WEDNESDAY
10	JUNE 8, 2011
11	+ + + + +
12	
13	The conference call was held, Robert Nelson,
14	Chairperson of the Petition Review Board, presiding.
15	
16	PETITIONER: PAUL GUNTER
17	KEVIN KAMPS
18	CO-PETITIONERS: MARY LAMPERT
19	RAYMOND SHADIS
20	PATRICIA BIRNIE
21	DAVE KRAFT
22	PETITION REVIEW BOARD MEMBERS
23	ROBERT NELSON
24	SIVA LINGAM
25	TANYA MENSAH
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1:57 p.m.

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3 MR. LINGAM: I am Siva Lingam. I am the 4 Petition Manager for this. I would like to thank 5 everyone for attending this meeting. We are here today to allow the Petitioners from Beyond Nuclear, 6 7 represented by Mr. Paul Gunter and Mr. Kevin Kamps; and Co-petitioners from Pilgrim Watch, represented by 8 Ms. Mary Lampert; New England Coalition represented by 9 Stockholders' 10 Raymond Shadis; GΕ Alliance Mr. 11 represented by Ms. Patricia Birnie; and Nuclear Energy 12 Information Service, represented by Mr. David Kraft, to address the NRC Petition Review Board, also 13 14referred to as the PRB, regarding the 2.206 petition dated April 13, 2011, and the co-petitions dated May 15 16 14, 2011, May 18, 2011, May 27, 2011, and May 31, 2011, respectively. I am the Petition Manager for 17 this petition, and Mr. Robert Nelson is the Petition 18 Review Board Chairman. 19

As part of the PRB's review of 20 the 21 petition, the Petitioner was offered an opportunity to 22 address the PRB, to provide any relevant additional 23 explanation and support for the petition. Mr. Paul Gunter of Beyond Nuclear requested this meeting to 24 25 address the PRB. In accordance with Management

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Directive 8.11, the Petitioner may request that 1 а 2 reasonable number of associates be permitted to assist 3 in addressing the PRB concerning the petition. All of 4 the Co-petitioners were also notified about this 5 meeting. Co-petitioners Ms. Mary Lampert of Pilgrim Watch, Mr. Raymond Shadis of New England Coalition, 6 Ms. Patricia Birnie of GE Stockholders' Alliance and 7 Mr. Kraft of Nuclear Energy Information Service also 8 requested an opportunity to address the PRB during 9 10 For rest of the Co-petitioners Marvin this meeting. 11 Lewis, Janet Tauro of New Jersey Environmental 12 Federation, Janet Tauro of Grandmothers, Mothers and More for Energy Safety, Tim Judson of Central New York 13 14Citizens Awareness Network, Deb Katz of Citizens Awareness Network, John LaForge of Nukewatch, Louis 15 Zeller of Blue Ridge Environmental Defense League, 16 John Sanbonmatsu from Worcester Polytechnic Institute, 17 Patsy Lowe, Scott Portzline of Three Mile Island Alert 18 security consultant, and Pine duBois of Jones River 19 Watershed Association, we apologize for not able to 20 21 allow any time to present the PRB because of time 22 constraints, however, welcome any additional we information you can provide in writing for PRB review. 23 24 For any other Co-petitioners that I missed, they will the same thing; they can provide additional 25 have

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information in writing for PRB review.

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This meeting is scheduled for two hours, from 2:00 PM to 4:00 PM. 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. The transcript will also be made publicly available through the NRC's Agency-wide Documents Access and Management System, also called as ADAMS.

For those at the NRC headquarters, we have 10 11 public meeting feedback forms that you are welcome to These forms are forwarded to our internal 12 fill out. communications specialists. You may either leave them 13 14here following the meeting or mail them back. They are already post-paid. If you are participating by 15 phone and would like to leave email feedback on this 16 public meeting, please forward your comments to me by 17 email siva.lingam@nrc.gov. 18

this 19 I'd like to open meeting with introductions of the meeting participants. 20 I ask that 21 all of the participants clearly state for the record your name, your position or occupation, 22 and your For those here in the room, please 23 organization. 24 speak up or approach the microphone so the persons on 25 the phone can hear clearly and so that the court

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7 reporter can accurately record your name. I will 1 start with myself and the other NRC participants here 2 3 in the room. 4 I am Siva Lingam, Petition Manager. 5 CHAIRMAN NELSON: My name is Robert I am the chairman of Petition Review Board. 6 Nelson. 7 I'm Deputy Director of the Division of Policy and Rulemaking at the NRC. 8 Tanya Mensah, I'm Petition 9 MS. MENSAH: Review Board Review Coordinator. I'm at NRR, Division 10 11 of Policy and Rulemaking. Samuel Miranda, Technical 12 MR. MIRANDA: Reviewer in the Reactor Systems Branch, office of 13 14Nuclear Reactor Regulation. I'm Kamal Manoly, 15 MR. MANOLY: Senior Technical Advisor, Division of Engineering, Office of 16 Nuclear Reactor Regulation. 17 MR. GOEL: Vijay Goel. Office of Nuclear 18 Reactor Regulation's Electrical Engineering Branch. 19 My name is Ed Smith. 20 MR. SMITH: I'm at Safety Systems, 21 NRR, Balance of Plant and I'm a Technical Reviewer. 22 23 MR. LINGAM: NRC Are there any 24 participants from Headquarters on the phone? 25 (No response.) **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

8 Are there any NRC participants from the 1 Regional Offices on the phone? Region I? 2 3 (No response.) Any participants from Region II on the 4 5 phone? In Region II you have MR. CHRISTENSEN: 6 7 Chris Christensen, NRC Region II, Atlanta. I'm the Deputy Director of the Division of Reactor Safety. 8 MR. LINGAM: Region III, please? 9 David Hills, Engineering HILLS: 10 MR. 11 Branch Chief, NRC Region III. MR. MEGHANI: And this is Vijay Meghani, 12 Division of Reactor Safety, Branch 1. 13 14 MR. LINGAM: Region IV, please. (No response.) 15 Are there any representatives from the 16 licensees on the phone? 17 18 MR. BEAUMONT: This is Mark Beaumont, Director of Nuclear Regulatory Programs for the ERS 19 Corporation. 20 21 MR. HAMRICK: Stephen Hamrick, counsel for 22 NextEra Energy Duane Arnold. 23 MR. DEVINCENTIS: Jim Devincentis, Entergy 24 Nuclear Operations. 25 MR. LINGAM: Anybody else? **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	(Simultaneous speaking.)
2	MS. BELL: Florence Bell, Regulatory Staff
3	in South Carolina.
4	MR. SNYDER: Kirk Snyder, Detroit Edison.
5	MS. McFARLAND: Lisa McFarland, NPPD.
6	(Simultaneous speaking.)
7	MR. EDDY: Paul Eddy, New York Public
8	Service Commission.
9	MR. LINGAM: Anybody else?
10	MS. BELLIN: This is Carol Bellin. I'm a
11	member of the public calling from Montana.
12	MR. ZACHS: Vaughn Zachs, State of New
13	Jersey, Bureau of Nuclear Engineering, Department of
14	Environmental Protection.
15	MR. BERGERON: Ken Bergeron calling from
16	New Mexico. I'm a private citizen as well.
17	MR. PORTZLINE: I'm Scott Portzline from
18	Harrisburg, Pennsylvania, Three Mile Island Alert.
19	MR. CLEMENTS: This is Tom Clements with
20	the environmental organization Friends of the Earth in
21	Columbia, South Carolina.
22	MS. MARSH: This is Janet Marsh. I'm here
23	with Lou Zeller, Blue Ridge Environmental Defense
24	League.
25	MS. GOTSCH: Paula Gotsch of the Oyster
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1	Creek Area GRAMMES.
2	MR. CRUM: Jeff Crum, Grandmothers,
3	Mothers and More for Energy Safety
4	MR. LINGAM: If you're a Co-petitioner,
5	please state so.
6	MR. RIEDER: Jonathan Rieder, Wells Fargo
7	Securities.
8	MR. EPSTEIN: Eric Epstein, Three Mile
9	Island Alert, Harrisburg, Pennsylvania.
10	MR. LINGAM: Anybody else? Mr. Gunter and
11	Mr. Kamps, would you please introduce yourself for the
12	record?
13	MR. GUNTER: My name is Paul Gunter. I'm
14	Director of the Reactor Oversight Project for Beyond
15	Nuclear.
16	MR. KAMPS: My name is Kevin Kamps,
17	Radioactive Waste Specialist at Beyond Nuclear. I
18	also serve on the Board of Directors of Don't Waste
19	Michigan and the Nuclear-Free Green Energy Task Force
20	of Great Lakes United.
21	MR. LINGAM: Ms. Lampert
22	OPERATOR: This is Headquarters Operations
23	Officer, for the NRC folks, could we please delay
24	start of the 2.206 petition call in that we have an
25	excessive number of callers. We're trying to find
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11 additional lines to accommodate them. 1 (Whereupon, the above-entitled matter went 2 3 off the record at 2:08 p.m. and resumed at 2:37 p.m.) CHAIRMAN NELSON: Okay, this is Mr. 4 Nelson, the chair of the Board. 5 We're going to recommence from where we left off and I'm going to 6 7 turn it back over to Mr. Lingam. MR. LINGAM: At this point, we're delayed 8 due to the number of callers. I just want to make 9 10 sure the introductions are limited to Co-petitioners 11 that are given time to speak, to assure we've provided Petitioners the allotted time. 12 Ms. Lampert, as a Co-petitioner, will you 13 14please introduce yourself for the record? MS. LAMPERT: Yes, Mary Lampert, L-A-M-P-15 E-R-T. Pilgrim Watch. 16 MR. Mr. Shadis, 17 LINGAM: as а Copetitioner, would you please introduce yourself for 18 the record? 19 20 MR. SHADIS: Thank you, sir. Raymond 21 Shadis for New England Coalition. My last name is 22 spelled S-H-A-D-I-S. 23 MR. LINGAM: Ms. Birnie, as a 24 Co-petitioner, would you please introduce yourself for 25 the record? **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	MS. BIRNIE: Patricia Birnie, B-I-R-N-I-E,
2	GE Stockholders' Alliance.
3	MR. LINGAM: Mr. Kraft, as Co-petitioner,
4	would you please introduce yourself for the record?
5	MR. KRAFT: This is Dave Kraft, spelled K-
6	R-A-F-T. I'm Director of Nuclear Energy Information
7	Service in Chicago, Illinois.
8	MR. LINGAM: We are sorry we cannot give
9	opportunity for the rest of the Co-petitioners to
10	introduce themselves because of the time limit. So I
11	would like to emphasize that we need to speak clearly
12	and loudly to make sure that the court reporter can
13	accurately transcribe this meeting. If you do have
14	something that you would like to say, please first
15	state your name for the record.
16	For those dialing into the meeting, please
17	remember to mute your phones to minimize any
18	background noise or distractions. If you do not have
19	a "mute" button, this can be done by pressing the keys
20	*6. To unmute, press the *6 keys again. Thank you.
21	At this time, I'll turn it over to the PRB
22	Chairman, Robert Nelson.
23	CHAIRMAN NELSON: Good afternoon. My name
24	is Robert Nelson. As Siva mentioned, I am the chair
25	of the Board. Welcome to this meeting regarding the
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2.206 petitions submitted by Mr. Gunter and Mr. Kamps of Beyond Nuclear, Ms. Lampert of Pilgrim Watch, Mr. Shadis of New England Coalition, Ms. Patricia Birnie of GE Stockholders' Alliance, Mr. Marvin Lewis, and Mr. David Kraft of Nuclear Energy Information Service.

I'd like to first share some background on 6 7 our process: Section 2.206 of Title 10 of the Code of Federal Regulations describes the petition process, 8 9 primary mechanism for the public to request the enforcement action by the NRC in a public process. 10 11 This process permits anyone to petition the NRC to take enforcement-type action related to NRC licensees 12 or licensed activities. Depending on the results of 13 14its evaluation, NRC could modify, suspend or revoke an NRC-issued license or take any other appropriate 15 enforcement action to resolve a problem. 16 The NRC staff's guidance for the disposition of 2.206 petition 17 requests is in Management Directive 8.11, which is 18 19 publicly available.

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

I'd like to make some points regarding

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this meeting. This meeting is not a hearing, nor is it an opportunity for the Petitioner to question or examine the PRB on the merits or the issues presented in the petition request.

The Board will make no decisions regarding the merits of this petition at this meeting.

7 Following this meeting, the Petition Review Board will conduct its internal deliberations. 8 this internal meeting 9 The outcome of will be discussed with the Petitioners. 10

11 The Petition Review Board typically consists of a Chairman, usually a manager at 12 the Senior Executive Service level at the NRC. The 13 14 Petition Manager is me, Bob Nelson. It has a Petition Manager, Siva Lingam and a PRB Coordinator. Other 15 members of the Board are determined by the NRC staff 16 based on the content of the information in 17 the petition request. 18

would 19 At this time, Ι introduce the 20 remaining members of the Board. As I mentioned, I'm 21 Robert Nelson, the Petition Review Board Chairman. 22 Siva Lingam is the Petition Manager. Tanya Mensah is the office's PRB Coordinator. Our technical staff 23 includes: 24

25 Samuel Miranda from the Office of Nuclear Reactor

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Regulation's Reactor Systems Branch. Edward Smith 1 the Office of Nuclear Reactor Regulation's 2 from 3 Balance-of-Plant Branch. Kamal Manoly, Senior 4 Technical Adviser from the Office of Nuclear Reactor 5 Regulation's Division of Engineering. Vijay Goel from the Office of Nuclear Reactor Regulation's Electrical 6 7 Engineering Branch. Gerry Gulla from the Office of Lauren Gibson from the Division of 8 Enforcement. Operator Reactor Licensing Communications Team. 9 Jim Clifford from the NRC Region I Office located in 10 11 King of Prussia, Pennsylvania, Harold Christensen from the NRC Region II Office located in Atlanta, Georgia, 12 David Hills from the NRC Region III Office located in 13 14 Lisle, Illinois and Tom Farnholtz from the NRC Region IV Office located in Arlington, Texas. 15 And we obtain advice from our Office of 16 General Counsel, represented by Michael Clark and 17 Kimberly Sexton. 18 As described in our process, the NRC staff 19 may ask clarifying questions in order to better 20 21 understand the Petitioner's presentation and to reach 22 a reasoned decision whether to accept or reject the Petitioner's requests for review under the 2.206 23 24 process. Also, as described in our process, the licensees have been invited to participate in today's 25 **NEAL R. GROSS**

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meeting to ensure that they understand the concerns about their facilities or activities. While the licensees may also ask questions to clarify the issues raised by the Petitioner, I want to stress that the licensees are not a part of the PRB's decision-making process.

I would like to next summarize the Petition Review Board's understanding of the scope of the petition under consideration and the NRC activities to date.

11 On April 13, 2011, Mr. Paul Gunter and Mr. 12 Kevin Kamps of Beyond Nuclear, who will be referred to in the meeting as the Petitioners, submitted 13 а 14 petition, under Title 10 of the Code of Federal Regulations, Part 2.206, regarding immediate shutdown 15 of all GE BWR Mark I Units. Subsequently, Ms. Mary 16 Lampert of Pilgrim Watch, Raymond Shadis of 17 New England Coalition, Patricia Birnie of GE Stockholders' 18 Alliance, Marvin Lewis, David Kraft of New Energy 19 Information Service, Janet 20 Tauro of New Jersev Environmental Federation, Janet Tauro of Grandmothers, 21 22 Mothers and More for Energy Safety, Tim Judson of Central New York-Citizens Awareness Network, Deb Katz 23 24 of Citizens Awareness Network, John LaForge of Nukewatch, Louis Zeller of Blue Ridge Environmental 25

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Defense Leaque, John Sanbonmatsu from Worcester Polytechnic Institute, Patsy Lowe, Scott Portzline of Three Mile Island Alert security consultant, and Pine duBois of Jones River Watershed Association respectively requested to be added as Co-petitioners to the above mentioned Beyond Nuclear petition, and will collectively be referred to as Co-petitioners.

8 The Petitioners seek the enforcement 9 action to immediately shut down all GE Boiling Water 10 Reactor Mark I Units for the following reasons:

11 fundamentally flawed combination of free standing 12 steel primary containments for the pressure suppression containment systems; spent Fuel pools 13 14 elevated to the top of the reactor building outside and above the rated containment structure without 15 safety-related back-up electric 16 power, Class E1systems to cool high-density storage of thermally hot 17 and highly radioactive nuclear waste in the event of 18 loss of grid power. 19

The Fukushima Daiichi nuclear catastrophe 20 21 demonstrates the vulnerability of this large volume of 22 nuclear materials outside of any rated containment in the event of a prolonged electrical grid power failure 23 24 without back-up emergency Alternating Current electrical and without the additional 25 generators

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reliable emergency backup of Direct Current battery systems.

3 The subject Mark I units were identified 4 as early as September 22, 1972 by memo from Dr. 5 Stephen Hanauer of US Atomic Energy Commission, to be vulnerable to early failure under severe accident 6 7 conditions including over-pressurization. Moreover, safety concerns over the substandard Mark I pressure 8 suppression containment system were again affirmed in 9 1986 by Dr. Harold Denton, Director of the Office of 10 11 Nuclear Reactor Regulation with the US Nuclear 12 Regulatory Commission, when he told a nuclear industry conference that the flawed reactor containment type 13 14has as high as 90 percent chance of failure if challenged by a severe accident conditions. 15

16 This same reactor design has now dramatically failed 17 in Japan to reliably and adequately mitigate and contain significant 18 and mounting radiological 19 releases to the atmosphere, 20 groundwater and the ocean from multiple severe 21 accidents in multiple GE BWR Mark I units at the 22 Fukushima Daiichi nuclear power plant.

23 In order to assure long-term containment 24 integrity, an option to temporarily defeat the 25 was provided by NRC the containment to Mark Ι

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operators by voluntarily installing the hardened 1 wetwell vent system, also known as direct torus vent 2 3 system, that runs from the torus directly to the plant 4 vent stack without going through charcoal bed 5 radiation filtration system, referred to NRC Generic The Petitioners assert that the failure 6 Letter 89-16. 7 of the Mark I containment even with the hardened vent Fukushima Daiichi 8 system at demonstrates the inadequacy in design to mitigate and contain a severe 9 accident resulting from longer station blackout. 10

In conclusion, the Petitioners state: 11 "Given this 12 traqic demonstration at Fukushima, the rational, reasonable and only relevant protection is remove the 13 14 Mark I from any set of circumstances that might ever challenge the failed experiment again." 15

With regard to enforcement actions, 16 the Petitioners requested to immediately suspend operating 17 licenses of all GE BWR Mark I Units pending full NRC 18 19 review with independent expert and public participation from affected emergency planning zone 20 21 communities.

The Petitioners also requested that all GE BWR Mark I operating licenses be suspended until the following emergency enforcement actions are taken. And I'm only listing highlights here.

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Conduct public meetings within each of the 1 ten-mile emergency planning zone for each GE BWR site 2 the purpose of 3 for receiving public comment and 4 independent expert testimony regarding the reliability 5 of hardened vent system or direct torus vent system. Immediately revoke prior pre-approval of 6 7 the hardened vent system or direct torus vent system at each GE BWR Mark I unit under the provisions of 10 8 CFR 50.59. 9 10 Confirmatory Immediately issue Action 11 Orders to all GE BWR Mark I units to promptly install 12 safety-related backup electrical power, Class E1, and additional backup Direct Current battery system to 13 14 ensure reliable supply of power for the spent fuel pool cooling system. 15 Now please allow me to discuss the NRC 16 activities to date. 17 On the morning of April 19, 2011, the 18 petition manager contacted the Petitioners by email to 19 discuss the 10 CFR 2.206 process and offered the 20 21 Petitioners an opportunity to address the PRB by phone 22 The Petitioners requested to address or in person. the PRB in person with an updated petition prior to 23 24 the PRB's internal meeting to make the initial recommendation to accept or reject the petition for 25 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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review.

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On the afternoon of April 19th, the PRB 2 3 met internally to discuss the request for immediate 4 action in the petition. On April 24, the Petitioners 5 were informed that the PRB denied the request for immediate action. Based on the information provided 6 7 in the petition, and the information available through the NRC's ongoing assessment of the Fukushima Daiichi 8 nuclear plant, the Petition Review Board did not 9 10 identify any immediate safety concerns which would 11 impact the health and safety of the public. 12 Therefore, the PRB denied the request for immediate action. 13

14 As a reminder for the phone participants, I ask you again to please identify yourself if you 15 any remarks, as this will help us 16 make in the preparation of the meeting transcript that will be 17 made publicly available. Also, please speak loudly, 18 clearly, and directly into your phone or microphone. 19 We have a lot of people on the line and the volume is 20 not the best. 21

Mr. Gunter, I'll now turn it over to you to allow you to provide any additional information you believe the Board should consider as part of this petition. Your presentation concludes in

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22 approximately 30 minutes as you requested and I will 1 allot the Co-petitioners additional time to address 2 3 the Petition Review Board. I also like to mention that we are unable 4 5 to allow other Co-petitioners to present because of time constraints, however, we welcome any additional 6 7 information you can provide in writing for our review. Are there any questions before we proceed? 8 (No response.) 9 10 GUNTER: MR. Thank you, Mr. Nelson. 11 Again, my name is Paul Gunter. I'm Director of the Reactor Oversight Project for Beyond Nuclear. 12 thank We to the U.S. Nuclear 13 want 14 Regulatory Commission for the opportunity to address the PRB on this unprecedented event. 15 It is now in evidence that there's broad public concern that the 16 Agency should pay attention to. 17 I'd like to start by first of all saying 18 that according to a 2002 Office of Inspector General 19 20 Report, "The NRC appears to have informally 21 established an unreasonably high burden of requiring absolute proof of a safety problem versus lack of 22 reasonable assurance of maintaining public health and 23 safety before it will act to shut down a power plant." 24 Such is now the case, once again, before the NRC with 25 **NEAL R. GROSS**

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the General Electric Mark I Boiling Water Reactor.

The Fukushima nuclear accident 2 has 3 reaffirmed many previous warnings from former federal 4 safety regulators and experts like Atomic Energy 5 Commission, the Chief Safety Officer, Dr. Steven Hanauer in 1972; Dr. Harold Denton with NRC in 1986; 6 7 and even with the nuclear engineers who were intimately involved in the development of the Mark I, 8 namely Dale Bridenbaugh, Gregory Hubbard, and Richard 9 Minor who resigned their prestigious positions from GE 10 11 in 1976. All of these gentlemen foresaw this accident at Fukushima coming and spoke out early on in the 12 interest of safety. 13

14 The General Electric Mark I Boiling Water Reactor is not a quality product. It is highly prone 15 to failure during an accident and its further use 16 should be discouraged. Beyond Nuclear submitted an 17 emergency enforcement petition to the NRC on April 18 13th requesting suspension of operations at all U.S. 19 pending the following specific emergency 20 I Mark enforcement actions. The NRC has requested to convene 21 22 a public meeting in each of the emergency planning zones for each Mark I nuclear power plants to take and 23 24 transcribe public comment and their independent experts as part of the Agency's March 2011 chartered 25

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review of the implications of the Fukushima Daiichi Nuclear Power Plant accident.

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Secondly, the NRC is requested to revoke its approval of the installation of the GE Mark I hardened vent system as provided in Generic Letter 89-16 in September 1989 under the provisions of 10 CFR 50.59 and I stress instead require all GE Mark I operators to submit to the formal license amendment process accorded with full public hearing rights.

10 Third, the NRC is requested to require all 11 owner/operators to retrofit the Mark I spent fuel 12 pools with Class E1 emergency backup power systems including independent AC power generators and DC 13 14 battery backup up to 72 hours to assure the reliable operation of cooling systems for hundreds of tons of 15 thermally hot and highly radioactive used nuclear fuel 16 stored under water in elevated storage ponds and each 17 of these Mark I in the event of a loss of off-site 18 19 electrical power.

On June 8th, today, 2011, marks the 90th day of the on-going multiple severe nuclear accidents at Japan's Fukushima Daiichi Nuclear Power Plant complex as a result of an extended station blackout, loss of grid power, emergency diesel generators, and depletion of onsite battery backup and multiple loss

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of cooling accidents caused by the Great Eastern Japan earthquake and tsunami of March 11, 2011. March 13th, I'm sorry. It is March 11, right.

4 Α loss of cooling accident from an 5 extended station blackout can be caused by other events or a combination such 6 of events as the 7 simultaneous occurrence of a catastrophic flooding 8 along the Missouri River, for example, something that 9 Fort Calhoun is experiencing right now, and then 10 simultaneously damage from a super tornado or perhaps 11 something more sinister or deliberate like the 12 vengeful and calculated actions of a determined enemy. Any accident that challenges a substandard and a 13 14 dangerously flawed Mark I has the same potential consequences and worse. 15

More than 24 miles of the Japanese eastern 16 coastline and 12 miles inland, already devastated by 17 the earthquake the tsunami, will 18 and not be inhabitable for the 19 reconstructed or foreseeable significant 20 future because of the radioactive 21 contamination that continues to escape from the 22 Fukushima Mark I. Significant radioactive contamination is in evidence in area groundwater, 23 24 soil, vegetation tens of miles away and still being 25 discovered even farther away. Millions of gallons of

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radioactive water from the stricken reactors continues to flow into the sea contaminating Japan's key food sources of fish and seaweed. This is but a portion of the mounting evidence of the failed experiments with the Mark I and the deeply-flawed containment system.

Beyond Nuclear supplements its April 13, 6 7 2011 petition to include the following Mark Ι reactors, Browns Ferry Units 1, 2, 3; Brunswick 1 and 8 9 Cooper 1; Dresden 2 and 3; Duane Arnold 2; 1; 10 Fitzpatrick 1 and 2; Hatch 1 and 2; Hope Creek 1; 11 Monticello 1; Millstone 1; Nine Mile Point 1; Oyster 12 Creek; Peachbottom 2 and 3; Pilgrim; Quad Cities; and Vermont Yankee. 13

14Our first requested emergency action is that NRC come into each of these Mark I communities 15 into the emergency planning zones and explain its 16 justification for the continued operation of the Mark 17 I reactors and take testimony from public and their 18 experts for incorporation into the Agency's chartered 19 long-term review of the implications of Fukushima for 20 21 U.S. reactor operations.

22 The Mark I licensees initially were licensed under the contract and public trust that the 23 24 reactor operated in а containment system with essentially leaked tight as part of the Agency and 25

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defense-in-depth philosophy. industry's The 1 2 containment was supposedly designed, constructed and licensed to withstand the associated pressures of a 3 4 loss-of-coolant accident and а disruptive core 5 explosion to contain radioactive nuclides that might be released in a reactor accident. 6 This assurance allows power plants to be sited close 7 to large population centers. But the dramatic evidence of the 8 9 four explosions at Fukushima, three full-core 10 significant radioactive meltdowns and the 11 contamination released into the atmosphere, the land, 12 the groundwater, and millions of qallons of radioactive cooling water pouring into the sea clearly 13 14 represents with reasonable assurance these three Mark I have failed. 15

Notification for the construction of a 16 nuclear power plant in the United States must meet a 17 set of General Desiqn Criteria which includes 18 Criterion 16, containment design which requires that 19 "reactor containment and associate systems shall be 20 21 provided establish an essentially leak-tight to 22 barrier aqainst the uncontrolled release of radioactivity to the environment and to assure that 23 the containment design conditions important to safety 24 are not exceeded for as long as a postulated action 25

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conditions require."

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The Petitioners are supplementing their 2 April 13th petition asserting that the Mark I system 3 4 is an unreliable and dangerous containment component. 5 We are submitting the 1976 joint testimony as supplement to our earlier petition of the three GE 6 7 engineers, Dale Bridenbaugh, Richard Hubbard, and Gregory Minor who publicly resigned from GE before 8 Congress testifying that the Mark I is not a quality 9 because integrity 10 product and of the primary 11 containment which in their view is an absolute 12 requirement for continued operation could no longer be assured. 13

14 The NRC eventually concurred. However, upon admission that the Mark I is not reliable as 15 contracted to be essentially leak tight, rather than 16 embark upon an actual containment improvement program 17 to seek to strengthen the Mark I to its licensed 18 condition as essentially leak tight, the industry and 19 the Agency instead chose to pursue an experimental fix 20 21 that now compromises containment to pursue the option 22 for the operators to vent the consequences of a severe accident to the atmosphere in order to save the flawed 23 24 product from permanent rupture. That experiment is 25 now demonstrated to have failed.

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The April 13, 2011 petition first argued 1 2 that the experimental hardened vent system has failed at Fukushima with significant safety implications to 3 4 US Mark I. On May 17, 2011, The New York Times 5 confirmed that "the emergency vents American officials said prevent hydrogen have would devastating 6 7 explosions at nuclear power plants in the United States were put to the test in Japan and failed to 8 work according to experts and officials with the 9 company that operates the crippled Fukushima Daiichi 10 11 Nuclear Power Plant."

The failure of the vents called into the 12 question the safety of similar nuclear power plants in 13 14 the United States and Japan. After the venting failed at Fukushima, the hydrogen gas fueled explosions that 15 radioactive materials into the 16 spewed atmosphere reaching levels about ten percent of the estimated 17 emissions from Chernobyl according to Japanese Nuclear 18 Regulatory Agency. As of June 7th, Japan doubled its 19 estimation to 20 percent of Chernobyl's release. 20

The Petitioners now emphasize the irrationality of the apparent regulatory retreat from the Agency's own and all important defense-in-depth regulatory standard and the unacceptable compromise that has been imposed upon health and safety, the

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approval and installation of the experimental venting system that was retrofitted to deliberately, albeit temporarily defeat the weaker, substandard containment of the Mark I through controlled release of an accident in order to save this principal and last barrier system from permanent rupture and uncontrolled releases.

The Times story further illuminates that 8 the venting design is the result of conflicting 9 10 schools of practice within the NRC: those who want 11 containment closed and those who need to have a 12 recognized weaker containment be vented under severe "It is a very controversial accident scenarios. 13 14system," an expert is quoted to say in the Times "It is alarming that there is no consensus 15 story. within the NRC over the controversial compromise of 16 the Agency's defense-in-depth philosophy and thus the 17 public health and safety." 18

regulatory consensus 19 The lack of and evidence from Fukushima further warrants the requested 20 21 suspension of the operation of the Mark I and the 22 requested emergency enforcement actions. The news article concludes that a redesign of the venting 23 24 system itself might be necessary which brings to 25 second emergency enforcement request. The NRC should

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revoke the Mark I experimental hardened vent system as provided under 10 CFR 50.59 and require the operators to submit the license amendment process with full hearing rights by the public.

5 The provisions of 50.59 provide making changes to nuclear power plants without going through 6 7 the NRC prior approval, review, or the license amendment process and therefore such changes are not 8 subject to public hearings, but only if the change 9 does not result in "more than a minimal increase" in 10 11 the risk of the occurrence of an accident, malfunction 12 of safety components, or create the possibility of an accident of different types." 13

14 The NRC is now conducting its chartered implications 15 review the of the catastrophic on accident for U.S. 16 Fukushima reactors which more 23 17 directly bears upon the Mark I and their experimental venting system. We charge that this 18 19 process itself requires a revocation of these 50.59 20 approvals.

We have reviewed the NRC and the industry correspondence in reply to Generic Letter 89-16 which particularly was the NRC guidance for the Mark I hardened vent installation and it revealed the record with a scant, inconsistent and incomplete response

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from the operators. Much of the controversial documentation is classified as proprietary by industry and not publicly available. Some inspection findings on the installations are available, others are not. Other inspections found violations, but that's where the public record ends.

7 Oyster Creek in New Jersey, Millstone I in Connecticut, Dresden II and III in Illinois, 8 and Fitzpatrick in New York in their October 18, 1989 9 10 reply declined to voluntarily install vents. Mark I 11 like Oyster Creek and Fitzpatrick said that they 12 already had existing vent systems. Oyster Creek eventually installed the upgraded 13 vent, but 14 Fitzpatrick, with its pre-existing vent was approved with "acceptable deviation." 15

The Petitioners now request that NRC publicly disclose the status of each Mark I vent installation by thoroughly reconstituting the public record and the release of proprietary information.

In closing, we are submitting our full supplemental comments in writing to the PRB and we further request at this time that the Petition Review Board convene another public meeting per Management Directive 8.11 to receive additional supplemental material and to accommodate the additional community

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33 groups that have submitted their request as 1 Co-petitioners to address the Petition Review Board. 2 3 Ι would now like to turn over the 4 remainder of the time to my colleague, Kevin Kamps. 5 MR. KAMPS: Thank you, Paul. My name is I serve as Radioactive Waste Specialist 6 Kevin Kamps. 7 at Beyond Nuclear. And my comments, my supplemental comments will address high-level radioactive waste of 8 GE BWR Mark I. 9 10 As Robert Alvarez at Institute for Policy

11 Studies said in his May 2011 report entitled "Spent Nuclear Fuel Pools in the United States Reducing the 12 Deadly Risks of Storage", high-level radioactive waste 13 14storage pool risks are no longer academic, theoretical or to be neglected or downplayed, that they have said, 15 for decades by the U.S. nuclear power industry, as 16 well as the Nuclear Regulatory Commission. 17 In light of the Fukushima Daiichi nuclear catastrophe, high-18 19 level radioactive waste storage pool risks are 20 particularly vulnerable GE BWR Mark I elevated pool 21 are especially concerning.

A coalition of scores of grassroots and national environmental organizations have urged NRC for nearly a decade, ever since the 9/11 terrorist attacks to empty GE BWR Mark I pools into hardened on-

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site storage. Our repeated appeals and warnings have fallen on deaf ears at NRC. The Agency's slogan is "protecting people and the environment" and it's proposed mission and mandate is to protect public health and safety, the environment, the common defense and security against the potentially catastrophic risks of nuclear power, including high-level radioactive waste pool storage.

Ironically, this has even included, this 9 10 response from NRC has even included NRC opposition to 11 environmental intervention aimed at upgrading high-12 level radioactive waste safety and security. As the BWR Mark I, the world's single largest GΕ 1122 13 14 meqawatt electric Fermi II Nuclear Power Plant in Monroe, Michigan, located on the shoreline of the 15 Great Lakes, 20 percent of the world's surface fresh 16 water, drinking water supply for 40 million people in 17 the United States and Canada and numerous Native 18 Americans and First Nation, and life blood of one of 19 the world's single largest regional economies. 20 This 21 opposition by NRC staff to our intervention for safety 22 and security upgrades for high-level radioactive waste storage is but one example of what is at stake. 23

Fermi II's elevated pools hold a little over 500 metric tons of high-level radioactive waste,

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several times more than Fukushima Daiichi's Unit 4 pool. Another example at Vermont Yankee's pool also contains well over 500 tons of high-level radioactive waste, putting not only Vermont, but also New Hampshire and Massachusetts and additional states and even countries downland or downstream at risk.

7 Incredibly, NRC has allowed Mark I pools to keep their high-level radioactive waste packed to 8 9 maximum capacity. As Robert Alvarez has reported, several times more densely packed than originally 10 11 designed. An especially egregious example of this is 12 at the Millstone Unit 1, Mark Ι in Connecticut. Although permanently closed since the mid-1990s, NRC 13 14has allowed this pool to remain packed with high-level incredible 15 radioactive waste, and entirely an unnecessary risk, an accident or attack waiting to 16 17 happen.

Mark I owners and operators seeking to defer dry cast storage costs for as long as possible has been allowed to put us all at incredible risk by keeping their pools packed to the gills.

My supplemental written submission which just hit the floor quotes at length Bob Alvarez' new report which clearly shows how these risks -- how big these risks are. In fact, BWR Mark I high-level

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radioactive waste storage pools represent some of the single most concentrated motherloads of hazardous radioactivity in the entire United States.

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For example, Alvarez cites the following 4 Mark ${\rm I}_{\rm s}$ as containing more than 200 million curies of 5 radioactivity associated with their adjacent nuclear 6 7 power plants that is: Millstone Unit 1, the entire site containing 500 million curies; Dresden Units 2 8 and 3, 350 million curies; Browns Ferry Units 1, 2, 9 and 3, 325 million curies; Nine Mile Point 1 and 10 11 Fitzpatrick 1, 300 million curies; Peachbottom 2 and 3, 250 million curies; Hatch 1 and 2, 250 million 12 curies; Hope Creek 1, 250 million curies; Quad Cities 13 141 and 2, 225 million curies.

Following close behind, Oyster Creek at 16 125 million curies and Vermont Yankee at 100 million 17 curies. In addition, Fermi II has 90 million; Duane 18 Arnold, 80 million; Cooper, 75 million; Brunswick 1 19 and 2, 75 million; Monticello, 70 million; and 20 Pilgrim, 70 million.

My written submission which I will turn into you also includes a lengthy excerpt from a 1996 book by David Lochbaum entitled <u>Nuclear Waste Disposal</u> <u>Crisis</u>. Lochbaum, a nuclear engineer with 17 years' experience with Mark I_s and has served at NRC as a

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trainer for NRC Mark I and sectors has long served as the director of the Nuclear Safety Project at Union of Concerned Scientists. His 1996 book written 15 years ago shows that Mark I high-level radioactive waste storage pool risks have long been known about and downplayed to our peril. In fact, he cites an alarming number of near-miss accidents that could have led to catastrophic radioactivity releases involving Mark I pools.

10 These risks are made all the worse by Mark 11 I pools elevated design located outside any primary containment structure vulnerable to both accident and 12 attacks. Whether emptied suddenly by a drain down or 13 14slowly by a boil off, an uncovering of Mark I cooling water cover which preclude emergency response produced 15 a lethal gamma dose rate due to loss of radioactive 16 shielding provided by the water as has occurred at the 17 Fukushima Daiichi. 18

It could also lead in the matter of hours 19 or days to an exothermic zirconium fire which could 20 21 100 percent of the hazardous and release up to 22 volatile radioactive cesium-137 put in the pools. Millions or even tens of millions of curies' worth in 23 24 the environment due to a lack of primary containment.

So what are the potential consequences of

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such fires? A 1997 study cited by Alvarez and others 1 reported that 8 to 80 megacuries of cesium-137 could 2 3 be released from a pool fire into the environment. 4 This would result in 54,000 to 143,000 deaths the 5 report documented and it would result in 2,000 to agricultural 7,000 square kilometers of land 6 The report also calculated economic 7 contaminated. costs of \$117 to \$566 billion which has not been 8 adjusted for inflation. 9

10 A report by the NRC itself, NUREG-1738, 11 dated 2001, also looked at the potential for waste 12 pool fires and calculated that 25,000 people as far as 13 500 miles downwind from a pool fire could die from 14 latent cancer.

In conclusion, NRC should require not only 15 emergency backup power on Mark I pools as was laid out 16 earlier, emergency makeup water systems and supplies, 17 as well as water-level gauges, temperature gauges and 18 radiation monitors that would survive and continue to 19 function despite even severe natural disasters and 20 21 nuclear catastrophes as shown by Fukushima Daiichi as 22 being all too possible.

In addition to vital safety and security upgrades at Mark I pools in the U.S., the NRC should require as a matter of homeland security, national

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security, and public health, safety, and environmental 1 protection policy of the highest priority, 2 the 3 replacement of unnecessarily and indefensibly risky, 4 high-density storage of high-level radioactive waste 5 in Mark I pools, hardened on-site storage as an interim measure, as has been urged for nearly a decade 6 by almost 200 environmental groups across the U.S. 7 8 Thank you. CHAIRMAN NELSON: We'll go to the 9 10 Co-petitioners' presentations at this time. 11 Ms. Lampert, at this time you have 12 approximately ten minutes to address the Petition Review Board as you requested. 13 14 MS. LAMPERT: Thank you. Mary Lampert of Pilgrim Watch. Thank you for the opportunity. 15 I'm going to start off with a process 16 As you know, Pilgrim Watch, Massachusetts 17 issue. Attorney General filed requests for hearings 18 in Pilgrim's license renewal application, June 1 and June 19 2, respectively, on new and significant information 20 21 regarding the probability of accident severe 22 containment failures, hydrogen explosions, spent fuel failure, fires, and the probability of 23 pool far greater volume of releases and consequent off-site 24 costs than previously modeled. 25 **NEAL R. GROSS**

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These filings highlighted what's before the venting systems, spent fuel fires, etcetera.

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4 It was sent to the PRB and added to the 5 record, so the procedural question is this. Should the PRB hold the 2.206 process in abeyance until the 6 7 Atomic Safety and Licensing Board issues its opinion? We say no. But that's not what happened when a 2.206 8 on submerged non-environmentally qualified cables was 9 10 put on hold in early 2011. It was slated to be put up 11 on the <u>Federal Register</u>. It was put on hold because a 12 filing on the issue was filed by Pilgrim Watch and is before the Atomic Safety and Licensing Board 13 at 14Pilgrim. So you'll be facing the same question.

We believe that filing a license renewal 15 contention on the same subject as a 2.206 should not 16 present a conflict or require holding in abeyance 17 This is for two reasons. 2.206. 18 First is a very clear distinction between current operating safety 19 issues that occur before a reactor's 40th birthday, 20 21 their present safety concerns, albeit ones that 22 continue into the future. And on the other hand concern that only address the extended 20-year license 23 24 renewal period.

Second, the second issue of concern is

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you:

that we do not believe that under NRC regulation that 1 in the license 2 intervenors renewal process automatically surrender their right 3 to redress on 4 current operating safety issues under the 2.206 5 In fact, there is no regulation, simply a process. Management Directive 8.11 review process for 10 CFR 6 7 2.206 petition. Because both the LAR adjudication process and the 2.206 process take a considerable 8 period of time, Pilgrim, for example is in its sixth 9 10 year of adjudication in the license renewal process 11 and clearance type. We ask that both processes be 12 held simultaneously. And I respectfully request we have a PRB teleconference to work this procedural 13 14issue out. And we shall submit a written request to that effect. 15 I'll address two issues and, as you know, 16 Pilgrim was the initial experiment in the direct-cause 17 And it did not fix as advertised the basic 18 event. design flaw of the GE Mark I BWR. It did not prevent

design flaw of the GE Mark I BWR. It did not prevent containment failure. In fact, when it was tried, it failed three times at Unit 1, Unit 2, Unit 3 which is a pretty bad score.

In 1990, the NRC Chairman Kenneth Carr acknowledged one of the DTV's limits. He said that during some anticipated transient without scram event

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the pressure in the containment will rapidly increase. Venting pressure could be reached in a matter of minutes rather than hours. Therefore, venting may not prevent containment failure because of the high containment pressurization rate, but would provide additional time to scram the reactor and delay -delay, not prevent core melt.

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8 In March 2011, obviously, we had the first 9 real test and failure of the DTV. And we learned 10 three things. Properly trained operators in Japan 11 decided not to open the DTV when they should have 12 because they feared the effects offsite on significant 13 unfiltered releases.

14 Second, when the operators finally decided to open the DTV, they were unable to do so because of 15 initially and then subsequent 16 power loss heavy radiation to operate them manually. The failure of 17 the DTV to vent led to containment failure explosions 18 that resulted in significant off-site consequences. 19

Now how will this apply here? First, let's get properly trained operators not opening the DTV. This goes to the fact that Pilgrim's and other vents here to save a buck on filters. We always thought it was an unnecessary, unfair, poisoning of neighborhoods in order to save containment, but it was

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looked at as sort of a balance. However, it is seen to have unintended consequences because the operators are reluctant to open the vent because they recognize the contamination that will go out and therefore will wait and wait and wait until too long.

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There is really no economic basis for the 6 7 status quo, to leave unfiltered vents in place. It is not the practice in Europe. Entergy estimated that 8 adding a filtered vent at Pilgrim in their license 9 renewal application would cost \$3 million. Houses in 10 11 my neighborhood sell for more than that. Wayne 12 Leonard, CEO of Entergy, earned over \$27 million in compensation in one year 2010. Personally, I think he 13 14could live on \$24 million a year.

15 number one, the vent has to be So filtered. Number two, we learned in Japan when the 16 operators finally decided to open the vent, they 17 weren't able to do so. This would happen, I know for 18 sure, at Pilgrim because to open the first two valves 19 requires power from a battery. 20 If that is -- also 21 Pilgrim's control room has two key lock switches in a 22 series that have to be opened manually when the need to use the DTV occurs. All these steps can go awry 23 24 just as they went awry in Fukushima.

What we need, obviously, a passive system.

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This was recommended years ago out in Minnesota at Monticello to put in a rupture disk, properly set to release at the time needed, followed by valves that have ample redundancy to close once the situation is brought under control, to put the genie back in the bottle so to speak. This is doable. It is a design issue. It is not a design block.

Third, the failure of the DTV to vent led 8 to containment failure explosions at Fukushima as we 9 would find in the same weak containment structures we 10 11 have and highly significant ongoing off-site 12 consequences far in excess and currently modeled and assumed by NRC and industry in the of 13 event 14 containment failure.

Japan has shown that industry and NRC 15 probability off-site 16 assumptions of the of 17 consequences are wrong. We expect that Entergy and the rest of the licensees will continue to fight 18 having a filter, putting in reasonable fixes, relying 19 on incorrect assumptions that the suppression pool 20 21 will scrub out retain particulates and volatile 22 fission products and other particulates will be plated This hopeful assumption is simply wrong. 23 out. 24

CHAIRMAN NELSON: Ms. Lampert?

MS. LAMPERT: Yes.

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1	CHAIRMAN NELSON: I'm going to ask you to
2	bring to a closure your comments, please.
3	MS. LAMPERT: I'm going to do that. Thank
4	you.
5	Dr. Von Hippel explained this. NRC knew
6	this, which is in our filing. In summary, the design
7	team of the Mark I failure and what we need is to go
8	forward with a fixed DTV, spent fuel required to be in
9	dry cask. Thank you very much for this opportunity.
10	CHAIRMAN NELSON: Thank you, Ms. Lampert.
11	Mr. Shadis, at this time you have 10 to 15
12	minutes to address the Board as you requested.
13	MR. SHADIS: Thank you. And thanks for
14	the opportunity to address the Board. This is Raymond
15	Shadis speaking for New England Coalition and I would
16	like to preface with the caveat that my remarks are
17	intended to represent New England Coalition's views
18	only and I hope that if they are in any way
19	contradictory or in any way discount any remarks by
20	previous presenters that the PRB won't use that. Let
21	the remarks that have been made please stand.
22	From our point of view the 2.206 is not
23	asking that NRC change any of its regulations. What
24	we are asking for is for NRC to enforce its
25	regulations. Mr. Gunter brought up the design
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criterion, GDC 16 for containment design. What we are asking is that regulation, that design criterion be enforced and without any accommodation or editing in order to make it more palatable to the industry. The containment must be designed to contain and it is just strikingly unfair to propose to the public that it will contain except in certain circumstances.

8 With respect to the Mark I containment, 9 NRC -- and this is what is apparent to has us 10 observing over time -- that what NRC has done is to 11 adjust their regulations, adjust their enforcement, 12 adjust their inspections to accommodate all of the various weaknesses in the Mark I containment design 13 14 system. And at the same time, because NRC has an ambition to preserving the operation of these reactors 15 and to making it more profitable, they have allowed in 16 the extended power uprate process, they have allowed 17 take credit for containment 18 plant operators to overpressure in order to maintain suction on the pump. 19

I don't know, but it could very well be that the hesitation on the part of the Japanese reactor operators was just that, that they had gotten to a point where temperatures were such that they were afraid they were lose suction on their pumps and therefore were maintaining containment pressure rather

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than venting. I don't know. But it is certainly a predicament that NRC allowed reactor operators to be placed in. It adds to the complexity of working with this very intricate, active containment system. And I guess that's the key because its very weakness is its sophistication. Its very weakness is its complexity and it does require operator attention at the highest level and therein a failing.

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I would like to just briefly address one 9 part of that and that is that the Mark I containment 10 11 system requires power throughout the accident sequence 12 in order to be properly operated in order to function and it appears that at Fukushima power was lost to the 13 14various containment systems and accident mitigation system components not simply because of the earthquake 15 and not simply because of the dislocation of the 16 diesel emergency generators following the tsunami, but 17 more likely because of the interruption of circuitry 18 19 and power distribution within the plant due to 20 flooding.

When you look at this, I would point the PRB to the many news articles about the workers who were contaminated when their boots were overtopped. These guys were working in the turbine hall in the sub-basement of the turbine hall. Doing what? They

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were stringing new electrical cables into a pump and that pump to be used for an attempt to recover that particular reactor unit.

So you know, obviously, the cable was not 4 5 a victim of some common mode failure. Ιt was 6 functioning after the earthquake because they were 7 still operating those pumps after the earthquake. However, the pumps were not functioning when power was 8 9 restored to the site because power distribution somewhere along the line had failed. 10

11 This is particularly relevant to Vermont 12 Yankee because the question, the whole question of the non-qualified, susceptibility of safety-related 13 14electrical cable to wetness, to flooding, submergence, was an issue that we raised in the license renewal 15 It's an issue that the Atomic Safety and 16 proceedings. Licensing Board and the Commission itself decided to 17 It's a condition that was allowed. 18 ignore. It was written in to their rewrite on the GALL Report and 19 even though NRC staff opined that it might not take 20 21 care of aging issues, companies were allowed to leave 22 nonqualified cables in areas where they could get wet, but do no more than to inspect every six months and 23 24 test every several years.

This is a wholly limp-wristed, inadequate

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response to what is a design flaw. The design 1 2 criteria state that every component must be able to 3 withstand the environments in which it is expected to 4 operate, but this is not the case. And it's 5 particularly egregious when you're considering this 2.206 petition, I would ask you to reflect back on the 6 7 situation of March 10th and 11th. March 10th was an affirmation session in which the NRC Commission then 8 gave the nod to the staff to issue Vermont Yankee's 9 10 this cable license renewal even with issue 11 outstanding.

The next day was the Fukushima incident 12 and then -- and then, the Commission went ahead, based 13 14on nothing but hot air, to say that they were confident that the plants in the U.S. were safe and in 15 compliance and therefore they went ahead and issued 16 the renewed license to Vermont Yankee, not taking 17 Fukushima into consideration, but absolutely ignoring 18 And I'm hoping that when you review these things 19 it. 20 you won't do that.

If I may, just a couple of words about the fragility of the elevated spent-fuel pool at Vermont Yankee. In NUREG 1738, attachment 3, I believe it is, the NRC's consultant, seismic consultant, Dr. Robert Kennedy, points back to NUREG CR 5176 which is a

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seismic analysis on spent-fuel pool 1 at two representative plants, one of them being Vermont 2 3 Yankee. And he says for Vermont Yankee, Reference 1 4 being the cited NUREG, states that "critical failure 5 modes for gross structural failure of the pool is out of plain sheer failure of pool floor slab. With this 6 7 failure mode, the liner will be breached and a large crack will develop through the concrete floor slab 8 within a distance equal to the floor slab thickness 9 from the pool walls. Possibly," he says, "possibly, 10 11 the entire floor will drop out, but I think that such unlikely." failure is There's 12 qross а no quantification there for what unlikely means. 13 14 However, all of the jerry-rigged backfit

gizmos to spray water into the spent-fuel pool would 15 not mean very much if the bottom were to fall out. 16 In 2008, Vermont Yankee had a crane brake failure with a 17 loaded cask. The crane had been tested only to 80 18 percent of its anticipated load. I don't know why it 19 wasn't tested to 120 percent. It was tested with an 20 empty cask. And then some 30 plus tons were added. 21 The brakes failed on the cask. 22 And it failed. A few days later, a licensee event report, amended event 23 24 report was issued in which the company admitted that 25 that were intended the travel stops to prevent

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swinging the cask over the spent-fuel pool had not been put in place.

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3 I think the specter of a filled, concrete, 4 dry storage cask plummeting through the bottom of the 5 spent-fuel pool would be enough to make any review committee wonder about the effectiveness of providing 6 7 some fire hose in case of a drain down. Certainly, siqht radiation level 8 the line of would be 9 extraordinary. One could not count on the shielding of the wall if there were a fracture, a drop out of 10 11 the bottom of the spent-fuel pool. The fuel would be in a heap on the ground under the building. 12

Additionally, NRC very piously went to the plant and looked to see if they had hoses and stuff in place, but they didn't consider the possibility that a small hydrogen explosion or even an aircraft impact -by the way, the Mark I secondary containment says NUREG 1738 would provide no substantial barrier to aircraft penetration.

CHAIRMAN NELSON: Mr. Shadis --

21MR. SHADIS: I'm finishing right now, sir,22if I may.

CHAIRMAN NELSON:

24 MR. SHADIS: In that instance, what NRC 25 does not consider, and they didn't consider when we

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Thank you, sir.

52 worked on 1738 either is the draping of the metal roof, collapsed metal roof over the spent-fuel pool preventing the addition of any water from fire hoses or cans. I quess in sum, this is a real can of worms that Fukushima has opened up with respect to the efforts Mark Ι and NRC SO far to assess the vulnerability have been pathetically limited. And I hope that you will take this petition to heart and do Thank you. more. CHAIRMAN NELSON: Thank you for your comments, Mr. Shadis. Birnie, at this time Ms. you have approximately five minutes to address the Board as you requested. Ms. Birnie, you're going to Ms. Birnie?

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need to speak up. We can barely hear you.

MS. BIRNIE: Thank you.

19 CHAIRMAN NELSON: Please get closer to 20 your phone.

21 BIRNIE: I'll try. The on-going MS. 22 nuclear catastrophe has broadened and Japanese 23 intensified the public's awareness of the risks and 24 dangers of nuclear power. I urge you to consider the 25 following request related to the Beyond Nuclear

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petition submitted to the Nuclear Regulatory Commission on April 13, 2011.

I hope you will suspend the operating licenses of the GE Mark I reactors that are currently operating in the United States. I believe you should protect the public from uncontrolled releases of highly dangerous radioactive emissions that may be caused by long-recognized Mark I design flaws as well as by potential accidents otherwise.

I believe it is essential that the NRC 10 11 stop allowing Mark I reactors to continue stockpiling additional irradiated fuel rods in their used fuel 12 The lack or failure of backup power essential pools. 13 14 for cooling the fuel has been undeniably and tragically demonstrated at the Fukushima Daiichi 15 reactors in Japan. The fuel rods should be stored in 16 reinforced concrete casks. 17

I urge you to study and implement changes 18 suggested in the May 24, 2011 report issued by Robert 19 Alvarez of the Institute for Policy Studies. 20 Mr. 21 Alvarez advocates that essential safety measures be 22 implemented to address the dangerously over-crowded 23 fuel pools at all Mark I reactors where the irradiated fuel rods have been reracked and as other reactors 24 25 where the fuel pool has similarly been reracked beyond

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its design capacity.

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I find it unconscionable that the NRC has 2 3 authorized 20-year license extensions for 17 of the 4 Mark I reactors. One extension was even issued as 5 recently as March 21, 2011, namely the Vermont Yankee reactor only 10 days after the Fukushima Daiichi 6 7 disaster began. You even allowed the Vermont Yankee licensee to increase the 39-year-old's reactor power 8 I believe that all Mark I output by 20 percent. 9 10 operating licenses should be suspended until further 11 analyses of the Japanese crises are completed and lessons learned are implemented. 12 And finally, I urge that the makeup of the

And finally, I urge that the makeup of the NRC be modified to include at least one physician as part of the NRC Commissioners to help give the public more confidence in your vital work to protect public health and safety. Thank you.

18 CHAIRMAN NELSON: Thank you, Ms. Birnie,19 for your comments.

20 Mr. Kraft, at this time, you also have 21 approximately five minutes to address this Board.

MR. KRAFT: Thank you, Chairman Nelson. I want to make sure, can you hear me?

24CHAIRMAN NELSON: Yes, sir. Very clearly.25MR. KRAFT: Okay, very good. My name is

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Dave Kraft, Director of Nuclear Energy Information Service. We're a 30-year-old safe energy organization in Illinois.

I point out to this group that Illinois is 4 5 the most nuclear-reliant state in the United States. We have 11 operating reactors and 3 closed reactors. 6 7 We also possess within our borders the largest standing amount of high-level radioactive waste of any 8 9 state in the country. These reasons alone are 10 compelling enough to urge us to urge you to accept the 11 contentions in this petition.

In light of the explosions, fires, and the 12 now-confirmed meltdowns at the three Fukushima 13 14reactors, we express grave concerns about the safety of the continued operation of four BWRs at Dresden and 15 Quad Cities listed in the petition. 16 These four Illinois reactors are slightly older and of the same 17 desiqn type and vintage of those destroyed 18 at Fukushima. 19

I'd like to point out four unique concerns 20 21 that we have in Illinois that we believe this petition 22 addresses and that we ask the NRC to take under consideration. The first deals 23 with existing 24 uncertainties involving verifiable safety of the reactors and that this demands greater caution be 25

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exercised.

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First, the NRC has not done the proper level of safety analysis in previously granted installation of the Mark pre-approval of the т containment, the hardened vent system which was mentioned by Mr. Gunter earlier. We believe the NRC should require that GE Mark I Boiling Water Reactor operators submit to the formal license amendment process according with full public hearing rights.

10 The second point we want to make on this 11 issue is that the lessons learned from Fukushima have yet to be identified, let alone made actionable and 12 this is, in part, due to the sluggish, sometimes 13 14withholding and deceptive nature of the information flow coming from TEPCO, the Japanese government and 15 Given what is not known or currently 16 the IAEA. verifiable in terms of this international nuclear 17 disaster, the precautionary principle argues 18 for caution and it would seem that the German government 19 which represents the fourth largest economy in the 20 world has reached this conclusion and insisted on the 21 22 closure of its reactors pending thorough inspection. We would expect the same kind of consideration be 23 24 given in the United States.

The third point we'd like to make is that

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when Southwest Airlines learned of fuselage cracks and skin peeling in its fleet of 737 jets this past year, it grounded the jets pending complete reinspection and in many cases repairs. The NRC's current approach to allow reactors of Mark I containment to continue operating post-Fukushima would be akin to Southwest Airlines allowing its jets to continue flying until one crashed before taking action to verify safety. This attitude is reprehensible and unacceptable.

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10 The second unique Illinois consideration 11 would be that of precipitating events. While Illinois may not be subjected to tsunamis any time soon, we do 12 several unique precipitators for potentially 13 have 14catastrophic events that Japan lacks. The first is O'Hare Field. This is the second busiest airport in 15 the world. It's situated outside of Chicago and we 16 have calculated that normal flight time between O'Hare 17 and the two Dresden reactors is 9 minutes and to the 18 Quad Cities, 28 minutes. 19

20 An accidental or intentional airline crash 21 into the currently unprotected spent-fuel pool areas 22 of these reactors has the potential to sever cooling 23 water piping or institute other dangerous disruptive 24 events at reactors which would be similar to a tsunami 25 or an earthquake in Japan.

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The second unique consideration is NRC's robotic response after the 9/11 incident to ensure 2 3 that airline crashes into reactors and spent-fuel 4 pools -- the reaction we saw inspired zero confidence 5 in the Aqency that it takes this possibility seriously. With 11 operating reactors in Illinois, we 6 here cannot afford this level of indifference and 7 negligence and we hope that this petition will correct 8 the enormous deficit in NRC imagination. 9

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10 third consideration, all Illinois The 11 reactors are operating on river flood plains and the 12 current situation in Missouri and Nebraska speaks volumes as to what this means in terms of flooding. 13 14We would point out that moving forward in time in an impending global warming and planet disruptive world, 15 this has to be taken seriously. 16

Illinois predict Climate models for 17 greater amounts of precipitation, but also of a more 18 violent nature and of intense -- a greater intensity, 19 20 although less frequent. So this would mean you would 21 have a potential for flooding to have an effect in an Illinois reactor. 22

A third area of consideration is that the 23 24 Mark I spent-fuel pools are sited in a dangerous, 25 potentially, catastrophic manner. The Fukushima

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disaster has exposed the unique vulnerability of the 1 Mark I design that the spent-fuel pools are located 2 3 outside of sufficiently protective reactor containment and are sited five stories above ground. Neither the 4 5 NRC nor the U.S. Congress can repeal the law of gravity. Breakage or blockage of cooling water piping 6 7 will result in cooling water interruption or draining spent-fuel 8 of the reactor pool opens up the 9 possibility of recreating Fukushima in the United 10 States.

Permitting the continued operation of these reactors without correcting these design defects is tantamount to criminal negligence after seeing what has already occurred in Japan.

And the final unique Illinois situation 15 would be the potential damages to Illinois. We would 16 point out that Illinois is a prime agriculture state. 17 A nuclear accident of any kind here in Illinois opens 18 up the possibility of our state becoming the Belarus 19 or Japan of the United States. The potential economic 20 21 loss to agriculture here would be devastating as we 22 have seen after the Chernobyl and now the Fukushima disasters. Where nations 23 nuclear have imposed 24 embargoes on agricultural products coming from these nations as a result of the meltdown. 25

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For these reasons and those that you have heard previously, we request that the NRC accept the contentions of the petition and order the closure of the US BWR using the GE Mark I containment until such time as the requested investigation can be completed and a satisfactory safety result is independently verified.

We would conclude by pointing out that 8 whatever already happened must 9 has therefore be 10 possible. Fukushima is hard data that the NRC cannot 11 responsibly ignore. So we thank you for your 12 consideration in listening to these remarks and we would welcome any questions or discussion you might 13 14have. Thank you.

15 CHAIRMAN NELSON: Thank you, Mr. Kraft. 16 That concludes the presentations for the Petitioners 17 and the Co-petitioners. At this time staff in 18 headquarters have any questions for Mr. Gunter, Mr. 19 Kamps, Ms. Lampert, Mr. Shadis, Ms. Bernie, or Mr. 20 Kraft?

21 MR. GOEL: This is Vijay Goel. I have a 22 question --23 PARTICIPANT: Can't hear.

CHAIRMAN NELSON: Much louder, please.

MR. GOEL: This is Vijay Goel from

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61 Electrical Engineering Branch from NRC. I have a 1 question for Mr. Gunter. I think you mentioned that 2 3 the Mark I unit needs to have a safety-installed backup for loss of off-site power. I want to know 4 5 where did you get this information that they don't have backup power when there is loss of off-site 6 7 power. MR. GUNTER: This is for the fuel pool? 8 MR. GOEL: Yes. 9 10 GUNTER: Well, what we have seen MR. 11 typically is that the -- when there is a loss of off-12 site power that the fuel pool temperatures begin to rise. So we are concerned that loss of off-site power 13 14 represents -- we also understand that when the -- when there is a loss of off-site power that the -- that 15 there is a load shed to the spent-fuel pool cooling 16 17 system. MR. GOEL: Yes. 18 MR. GUNTER: Is that correct? 19 20 MR. GOEL: That's true 21 MR. GUNTER: Well, the question is not 22 about immediacy. The concern is about prolonged station blackout. So the power shed during a loss of 23 24 off-site power to the spent-fuel pool is a concern. 25 I understand it right now the Now as **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	mitigation is that you will make up water to the pool,
2	that you will simply let the water boil off and then
3	reconstitute the water levels in the pools as they
4	boil off.
5	Some of the supplemental information that
6	we want to get to you and we would also like you to
7	give us
8	CHAIRMAN NELSON: I'm sorry to interrupt.
9	Was your question answered?
10	MR. GOEL: No.
11	MR. GUNTER: Restate the question, please.
12	MR. GOEL: My question is where did you
13	get the information that they don't have backup power?
14	MR. GUNTER: We have seen again, we've
15	seen that the load shed during a loss of off-site
16	power I'd have to provide you with the
17	documentation. It's our understanding that there is a
18	load shed to the spent-fuel pool in a loss of
19	off-site power and the mitigation that you're using
20	right now is to reconstitute the water levels in the
21	pool.
22	MR. GOEL: That's not correct.
23	CHAIRMAN NELSON: Okay, I don't want an
24	argument. The question has been asked and answered.
25	Any other questions from the staff?
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1	MR. MANOLY: This is Kamal Manoly. One of
2	the Petitioners mentioned the report of Dr. Robert
3	Kennedy on the fragility of the fuel pool. Can you
4	give me the report number, please?
5	MR. SHADIS: Yes, this is Raymond Shadis.
6	That was I quoted that. It is NUREG 1738, spent
7	fuel pool accident risk at decommissioning nuclear
8	power stations. And it was attachment 3 by Robert P.
9	Kennedy.
10	MR. MANOLY: Thank you.
11	MR. SHADIS: You're welcome.
12	CHAIRMAN NELSON: Thank you, Mr. Shadis.
13	Any other questions from the staff at headquarters?
14	(No response.)
15	Regions? Region 1?
16	MR. CLIFFORD: Nothing from Region I.
17	CHAIRMAN NELSON: Region II, do you have
18	any questions?
19	MR. CHRISTENSEN: No questions from Region
20	II.
21	CHAIRMAN NELSON: Region III.
22	MR. HILLS: No questions from Region III.
23	CHAIRMAN NELSON: Region IV?
24	MR. FARNHOLTZ: No questions from Region
25	IV.
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64 CHAIRMAN NELSON: Do licensees either 1 present in the room or on the line have any questions 2 for the Petitioners or Co-petitioners? 3 4 (No response.) 5 I'm hearing no questions from the licensees, so we'll proceed. 6 7 MR. SHADIS: Mr. Chairman, this is Ray Shadis. 8 9 CHAIRMAN NELSON: Yes, sir. MR. SHADIS: A housekeeping detail. If I 10 11 may, you invited those persons who did not get to 12 present to provide written presentation. it Is possible for NRC to establish a site for that on their 13 14home page? I prefer that you send 15 CHAIRMAN NELSON: them to our Petition Manager, Siva Lingam, please. 16 MR. SHADIS: All right. Thank you. 17 LAMPERT: Will they be circulated? 18 MS. 19 Mary Lampert. This is Tanya Mensah for the 20 MS. MENSAH: I'm the Petition Review Board Coordinator. 21 NRC. Any 22 information that's provided as a supplement, either during this call or in writing will be made publicly 23 available in ADAMS and it will be provided to all the 24 25 Petition Review Board members to consider before we **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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1	make the initial recommendation.
2	CHAIRMAN NELSON: All right, is there any
3	that's a nice segue for my next question. Are
4	there any questions from anyone regarding the 2.206
5	process?
6	MR. GUNTER: This is Paul Gunter. So I
7	understand that Management Directive 8.11 does provide
8	us an opportunity to request an additional PRB meeting
9	and we've entered that request into the transcript. I
10	would like to just clarify that our request satisfies
11	establishing that second meeting?
12	MS. MENSAH: Yes, that's given to every
13	Petitioner. So after Siva Lingam informs the
14	Petitioners of the additional recommendations then
15	you'll be offered that opportunity. What I'm hearing
16	is you want that opportunity, so they will just have
17	to coordinate the date and time.
18	MR. GUNTER: Thank you. And at that
19	meeting that we as the Petitioner may defer our time
20	to the additional Co-petitioners who have requested to
21	speak, but have not been given that time at this
22	meeting?
23	MS. MENSAH: If that's your choice. Based
24	upon you providing us with additional information that
25	you want the Board to consider before we make the
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1	final. If you want to defer your time to other
2	MR. GUNTER: Co-petitioners.
3	MS. MENSAH: speakers or
4	Co-petitioners, that's your choice. You would just
5	need to coordinate, communicate that with Siva Lingam.
6	MR. GUNTER: Let me clarify. Are you
7	saying that we can defer our time to other speakers,
8	not Co-petitioners?
9	MS. MENSAH: Well, if they're not
10	Co-petitioners, we consider them members of the
11	public. And of course with the Management Directive
12	only members of the public can observe the meeting or
13	ask questions on the 2.206 process. If they're
14	Co-Petitioners, as you can see what we've done today
15	with the other Co-petitioners.
16	MR. GUNTER: To the petition itself.
17	MS. MENSAH: To the petition.
18	MR. GUNTER: Right. Okay, so in order to
19	speak to the petition, a member of the public has to
20	be a Co-petitioner to that petition?
21	MS. MENSAH: Right.
22	MR. GUNTER: Thank you.
23	CHAIRMAN NELSON: Are there any other
24	questions regarding the 2.206 process?
25	MR. KAMPS: This is Kevin Kamps. I just
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1	wonder if the Petition Review Board or any sub-agency
2	of NRC has a record of the results of previous 2.206
3	proceedings, so for example, has the Agency ever taken
4	action in response to a 2.206 petition or have they
5	all been rejected in the end?
6	MS. MENSAH: Well, the public website
7	contains a listing of all of the petitions that have
8	been accepted for review at this time. I can provide
9	the link to Siva and he can send that out if you want
10	to see that. But it's not just to clarify, it's
11	not a proceeding. It's the usual 2.206 process, not a
12	hearing process. That information is on the public
13	website.
14	MR. KAMPS: I would like to see that.
15	CHAIRMAN NELSON: Are there any other
16	questions?
17	MS. GOTSCH: Yes, this is Paula Gotsch for
18	Grandmothers, Mothers and More for Energy Safety. Why
19	is it that the process is you take the information,
20	you mull it over, and then you make a decision which
21	you then tell us about later?
22	In the process, why can't we be involved
23	as you're making the decision? It feels like you're
24	really kind of like taking this attitude that you're
25	like sacred or something that we shouldn't be involved
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while the great deliberations are going on. Great deliberations affect us all and we would love see your process and hear what you all are saying and why you come to the conclusions that you do.

5 CHAIRMAN NELSON: Yes, ma'am. I'd like to address that. First of all, we will have another 6 We will prior 7 meeting. to that meeting make а preliminary determination. That will be communicated 8 to the Petitioners at which time you can provide 9 additional information supporting your position. 10 We 11 will then take all of that information under advisement. 12

We have to have a process to review that 13 14information. We do that. We prepare a draft Director's decision if the petition is accepted. 15 That draft Director's decision has our full rationale for 16 any of the conclusions that we reach, that's provided 17 to the Petitioners, to the licensees for public 18 Those comments are then taken, reviewed and 19 comment. a final determination is made. 20

21 So there are numerous opportunities for 22 you to be involved, for members to be involved with 23 the process we're undertaking.

24Are there any other questions on the25process?

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MR. GUNTER: I just have one additional question with regard to the timing of the preliminary determination. Can you give us the time frame that you operate under for providing that preliminary determination and then -- I understand that you look

to make a final determination within 100 days, 120 days. Is that correct? So can you give us an idea of the actual time frame that you proceed under?

If the petition is accepted 9 MS. MENSAH: 10 for review, you will receive an acknowledgement letter 11 back from us that says from issuance of the date of that letter there are 120 days to issue what we call 12 our proposed Director's decision and that's when you 13 14have the opportunity to comment in writing. Prior to that, the phase we're in right now is to try to decide 15 if it meets the criteria for review or not. 16 And that consider all the information that 17 means we you present, supplemental, as well as any information that 18 you later present in additional meetings with us. 19

Based on however long it takes us to get to that process, we generally try to meet within a week to make our initial recommendation from having any teleconferences or public meetings with the Petitioner. I can't commit to say that that will happen in this case based on the volume of information

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that the technical leads and the advisors have to 1 receive, but Siva, as your point of contact, 2 will 3 certainly keep you advised, and if you have any questions, you can call him as well to ask him about 4 5 the status. MS. WARREN: Hello? 6 7 CHAIRMAN NELSON: Yes, we're here. This is Barbara Warren. 8 MS. WARREN: I'm 9 in New York. I'd like to ask about the regional meetings. When might you make a decision on holding 10 11 regional meetings? That request as submitted in 12 MS. MENSAH: the petition request has to be considered by the 13 14Board. That will be conveyed back to the Petitioners along with the initial recommendation. 15 So you haven't 16 MS. WARREN: made а decision with it, to hold regional meetings or not? 17 PARTICIPANT: That means don't hold your 18 19 breath. MS. WARREN: You know, I just want to say 20 21 that we have significant issues just with the plants 22 that are in New York. 23 CHAIRMAN NELSON: I understand that, 24 ma'am. 25 The comment that was made "don't hold your **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

breath", we're not going to sit on our hands and delay this process. A lot of information that's been presented here needs to be reviewed by a number of staff members. That is going to take some time. And we're not going to hastily go through that.

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need to give the information We due 6 7 diligence and time to review and we're going to do We're not going to delay and we'll provide an 8 that. And I believe Tanya has 9 answer as soon as we can. described the process and any time you have a question 10 11 regarding where we are in that process, you can call 12 the Petition Manager, Mr. Lingam.

MS. WARREN: Okay, and is there an opportunity for other people to put in comments on this petition for the public to add to that?

MR. LINGAM: This is Siva Lingam, the Petition Manager. You are welcome to send any supplemental information by email to me. We will make sure it has been reviewed by the Petition Review Board.

MS. WARREN: I understand it's a very difficult process given the enormity of the disaster in Japan, but that is more weight to the seriousness of what we're dealing with here and so we're very anxious to have a proper decision on this matter.

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72 CHAIRMAN NELSON: We understand that, 1 2 ma'am. 3 MR. KEHLER: This is Randy Kehler with 4 Safe and Green Campaign for Vermont Yankee. I simply 5 want to ask is this process you've just described considered an expedited process due to the fact that 6 7 this is a request for urgency enforcement? Do you consider this an emergency? 8 CHAIRMAN NELSON: I believe we've already 9 10 addressed the immediate nature of the request and that 11 was discussed earlier in the discussion regarding the status of the petition. 12 My question is what is this MR. KEHLER: 13 14expedited process that you have described? CHAIRMAN NELSON: We do not have at this 15 stage an expedited process. We'll proceed as fast as 16 we can, given the volume of information that we have 17 and the amount of information that we need to review. 18 I understand that and I 19 MR. KEHLER: I'm just asking whether under the 20 appreciate that. 21 circumstances is this the normal process that you would go through with due diligence or is this somehow 22 an expedited process? 23 24 CHAIRMAN NELSON: We do not have an expedited process. 25 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1	MR. KEHLER: Okay, thank you.
2	MS. GOTSCH: This is Paula Gotsch again,
3	Grandmothers, Mothers and More for Nuclear Safety. I
4	just have to say issues raised by the speakers today
5	
6	CHAIRMAN NELSON: Excuse me, ma'am
7	MS. GOTSCH: seem so glaringly obvious
8	that there are really bad problems here. The fact
9	that you're making it sound like oh, this is
10	information that we have to look at carefully. Why
11	aren't you saying what we're saying? Why haven't you
12	looked at it carefully? It makes me have no
13	confidence in you.
14	If you were to say hey, yeah, we know
15	this, that might make me a little more confident. But
16	it's so grossly obvious to the village idiot down the
17	street that there are terrible problems here and the
18	fact that you now have to weigh these things that
19	you've been told is just very crass. Thank you.
20	CHAIRMAN NELSON: Thank you for your
21	comments. We're going to close the meeting at this
22	point. Mr. Gunter, Mr. Kamps, Ms. Lampert, Mr.
23	Shadis, Ms. Bernie, Mr. Kraft and all those who have
24	spoken today thank you very much for your time to
25	provide the NRC staff with clarifying information on
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1	the petition you've submitted. Thank you all rest of
2	the co-petitioners.
3	PARTICIPANT: Nuclear Fuel Services,
4	Erwin, Tennessee, they've been contaminating for 54
5	years. They're killing an entire town and nobody
6	wants to talk about it.
7	CHAIRMAN NELSON: Before we close, does
8	the court reporter need any additional information for
9	the meeting transcript?
10	COURT REPORTER: Just the information that
11	we already talked about.
12	CHAIRMAN NELSON: With that, the meeting
13	is concluded. We'll be terminating the telephone
14	connections.
15	(Whereupon, at 4:17 p.m., the meeting was
16	concluded.)
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