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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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10 CFR 2.206 PETITION REVIEW BOARD (PRB)

CONFERENCE CALL

RE

GENERAL ELECTRIC (GE) MARK I AND II BOILING WATER
REACTORS (BWRs)

+ + + + +

MONDAY

SEPTEMBER 30, 2013

+ + + + +

The conference call was held, Jack Davis,
Chairperson of the Petition Review Board, presiding.
PETITIONER: BEYOND NUCLEAR, et al.

PETITION REVIEW BOARD MEMBERS

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JACK DAVIS, Director, Mitigation Strategies

Directorate

LEE BANIC, Petition Manager for 2.206 petition

ROBERT DENNIG, Branch Chief, Nuclear Reactor

Regulation

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Valley, Seabrook and Oyster Creek Plants

ERIC MICHEL, Senior Attorney, Office of

General Counsel

WILLIAM RECKLEY, Japan Lessons Learned

Directorate

NRC HEADQUARTERS STAFF

GEORGE SMITH, Facilitator

WAYNE SMITH, Region I

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2 P-R-O-C-E-E-D-I-N-G-S

3 12:59 p.m.

4 MEMBER LAMB: Good afternoon. My name is
5 John Lamb and I am the NRC Beaver Valley, Seabrook and
6 Oyster Creek senior project manager. We are here today
7 to allow the Petitioners represented by Mr. Paul Gunter
8 of Beyond Nuclear to address the Petition Review Board,
9 or PRB, regarding the 2.206 Petition dated March 21st,
10 2013. The ADAMS accession number is ML13085A218. The
11 PRB Chairman is Jack Davis. As part of the PRB's review
12 of this petition Mr. Paul Gunter has requested this
13 second opportunity to address the PRB.

14 This meeting is scheduled from 1:00 p.m. to
15 3:00 p.m. Eastern Time. The meeting is being recorded
16 by the NRC Operations Center and will be transcribed by
17 a court reporter. The transcript will become a
18 supplement to the petition. The transcript will also be
19 made available to the public.

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

24 CHAIRMAN DAVIS: I'm Jack Davis, Director
25 of Mitigating Strategies Directorate in NRR.

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1 MEMBER MICHEL: Eric Michel from the Office
2 of General Counsel.

3 MEMBER GORDON: Matthew Gordon, EDO's
4 Office.

5 MR. SMITH: Again, George Smith. I'll be
6 facilitating the meeting.

7 MR. GUNTER: Paul Gunter, Beyond Nuclear.

8 MR. JUDSON: Tim Judson, and I actually
9 have a change in affiliation to put on the record. I'm
10 on the petition. I was a representative of Citizens'
11 Awareness Network and Alliance for a Green Economy.
12 Still actually affiliated with those organizations, but
13 recently was appointed the associate director for the
14 Nuclear Information and Resource Service.

15 MEMBER RECKLEY: My name is Bill Reckley in
16 the Office of Nuclear Reactor Regulation, Japan Lessons
17 Learned Directorate.

18 MEMBER BANIC: Lee Banic, coordinator,
19 NRR.

20 MEMBER DENNIG: Bob Dennig, branch chief in
21 the Office of Nuclear Reactor Regulation.

22 MR. LAMB: Okay. We have completed
23 introduction at the NRC Headquarters at this time. Are
24 there any NRC participants from headquarters on the
25 phone?

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1 MR. SCHMIDT: John, this is Wayne Schmidt
2 from NRC Region I.

3 MR. LAMB: Okay. Thank you, Wayne. Are
4 there any NRC participants from the region? Wayne is
5 from the region. Anyone else?

6 (No audible response.)

7 MR. LAMB: Okay. Thank you. Due to the
8 large number of people for any of the licensees or members
9 of the public that are on the phone, I would appreciate
10 if you could send an email to john.lamb@nrc.gov as
11 confirmation of your participation by phone. My email
12 address is also located on the public meeting notice
13 under "Meeting Contact."

14 I would like to emphasize that we each need
15 to speak clearly and loudly to make sure that the court
16 reporter can accurately transcribe this meeting. If you
17 do have something that you would like to say, please state
18 your name for the record.

19 At this time I will turn it over to the PRB
20 chairman, Jack Davis.

21 CHAIRMAN DAVIS: Good afternoon. As John
22 said, the purpose of today's meeting is the second
23 opportunity for you all to tell us if you have any
24 additional information, explanation from what we talked
25 about the last time. So it's part of the process.

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1 As you already know; I have to go through
2 this anyway, the PRB is made up typically of a chair,
3 which is at the SES level, the PRB project manager for
4 it, and then a coordinator. And then we have technical
5 experts around the room that are associated with this
6 project that can help us with the technical issues.

7 A couple of things. One is it's not a you
8 know, as you know, and so you can't ask us questions of
9 the merits of your petition and so on. No decision will
10 be made during this meeting. And then of course we can
11 ask clarifying questions of you to understand your
12 position better and so on.

13 We will then conduct an internal
14 deliberation on any additional information you gave us
15 that's new since the last time. And of course, as you
16 know from previous times that we provide you information
17 back on what the outcome of that deliberation was.

18 We previously met in May, and so it's been
19 a couple of months, so perhaps there is additional
20 information. There's a couple of things that I would
21 just want to get on the record to make sure we do it here
22 properly, and I'm going to read it, so I apologize for
23 that, but it's for those that maybe aren't familiar.

24 So I'm going to highlight the scope of your
25 petition that's under review and on March 21st, 2013 Mr.

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1 Paul Gunter of Beyond Nuclear and several other folks
2 submitted to the NRC a petition under the 2.206 regarding
3 General Electric Mark I and Mark II boiling water
4 reactors. The petition has requested that the NRC
5 revoke the operating licenses for GE Mark I and two BWRs.
6 And John has already talked about the ADAMS accession
7 number for that, but for those of you that didn't get it,
8 it's ML13084A218. And you can get the exact wording.
9 It's much in depth than what I just gave here.

10 A few of the highlights of NRC significant
11 activity since the last time we met. We internally met
12 on April 8th of 2013 to review the petition to determine
13 if NRC immediate action was needed. As you know, the PRB
14 determined that NRC immediate action was not needed on
15 the basis that there was no immediate safety to licensed
16 facilities or to the health and safety of the public.

17 Mr. Gunter, you were informed of this by an
18 email dated April 17th, 2013. The ML for that is
19 13112A584.

20 On May 2nd of 2013, the PRB met with the
21 Petitioners in the public meeting, and the transcript is
22 available underneath ADAMS accession ML13144A127.

23 On July 8th of 2013, the Petitioners were
24 informed via email of the PRB's initial recommendation,
25 and that is also underneath ML13190A262.

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1 So with that, I'll turn it over to you, Paul,
2 and you can introduce your folks.

3 MR. GUNTER: Okay. My name is Paul Gunter
4 and I am director of the Reactor Oversight Project at
5 Beyond Nuclear. I'm going to allow those who are here
6 in the room that plan to speak to introduce themselves
7 and then we'll move to the phone bridge.

8 MR. JUDSON: Tim Judson, NIRS and Citizens'
9 Awareness Network.

10 MR. GUNTER: Okay. We'll move to the phone
11 bridge.

12 MS. LAMPERT: Mary Lampert, Pilgrim Watch.

13 MR. GUNTER: You have to speak up.

14 DR. CUTHBERT: Dr. Lewis Cuthbert,
15 Alliance for a Clean Environment, Pennsylvania,
16 regarding Limerick.

17 MS. AZULAY: Jessica Azulay, Alliance for
18 a Green Economy regarding Nine Mile Point and
19 FitzPatrick.

20 MR. TAYLOR: Wally Taylor with the Sierra
21 Club of Iowa regarding the Cooper Nuclear Station in
22 Nebraska and the Duane Arnold reactor in Iowa and the Quad
23 Cities nuclear reactor in Illinois.

24 MR. BROWN: Jeff Brown, Grandmothers,
25 Mothers and More for Energy Safety, GRAMMES, regarding

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1 Oyster Creek in New Jersey.

2 MR. JOHNSON: Chuck Johnson, Washington
3 and Oregon Physicians for Social Responsibility
4 regarding the Columbia Generating Station Nuclear Plant
5 on the Columbia River in Washington State?

6 MS. JOHNSTON: Gretel Johnston
7 representing BEST/MATRR in North Alabama regarding the
8 Browns Ferry Nuclear Power Plant.

9 MS. SACHS: Leslie Sullivan Sachs, Safe and
10 Green Campaign and the SAGE Alliance regarding Vermont
11 Yankee.

12 MR. GUNTER: Mary Lampert, are you on the
13 line?

14 MS. LAMPERT: Yes, I wasn't I guess
15 speaking loud enough. Mary Lampert, Pilgrim Watch in
16 reference to the Pilgrim Nuclear Power Station,
17 Plymouth, Massachusetts.

18 MR. GUNTER: Linda Lewison, are you on the
19 line?

20 (No audible response.)

21 MR. GUNTER: Okay. Thank you. So if you
22 all would please mute your lines until I call your name
23 out, I believe we're ready to proceed.

24 Okay. Thank you for the opportunity. The
25 March petition requests the revocation of the operating

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1 license for the 31 General Electric Mark I and Mark II
2 in the United States with unreliable pressure
3 suppression containment systems. The Petitioners
4 contend the current containment systems are not in
5 compliance with the general design criteria and
6 therefore they're licensing agreements. The
7 Petitioners further argue that current corrective
8 actions in response to the Fukushima Daiichi Lessons
9 Learned Task Force as proposed by the NRC and the
10 General Electric operators do not provide the public
11 health and safety with timely, adequate and reasonable
12 protection in the event of a loss of coolant accident.

13 The demonstrated failure of the GE Mark I
14 and Mark II containment systems and the uncontrolled
15 release of radioactivity from Fukushima underscore the
16 Petitioner's requested action for the revocation of the
17 unreliable Mark I and Mark II boiling water reactors in
18 the United States.

19 I'd also like to request -- if we have our
20 PowerPoint put up. Is it? Is it up, or going up? It's
21 up? Oh, there it is. Thank you. Next slide, please.

22 The former NRC chairman, Gregory Jaczko,
23 recently spoke in Tokyo on a panel before the Foreign
24 Correspondents Club of Japan on September 24th, 2013 on
25 the role of public involvement and the need to rethink

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1 nuclear power issues.

2 Chairman Jaczko said, quote, "One of the
3 things that has become very clear to me and become clear
4 to me after the accident began is that there are these
5 kinds of nuclear accidents that really are economy-wide
6 impact and simply unacceptable in Japanese society, in
7 American society, and I think really all over the world.
8 So it gives us an opportunity to take a step back and
9 figure out ultimately how we go forward in a way that
10 eliminates the possibility of these kinds of accidents.
11 And one of the keys to that certainly is the active
12 involvement and engagement of the public.

13 "Decisions about nuclear technology are
14 often controversial. They are often very difficult
15 involving sometimes science that has limited consensus
16 among technical experts. And so it's incumbent to fully
17 engage the public and be active on the part of government,
18 on the part of utilities and on the part of citizens to
19 be active participants in this endeavor.

20 "We know what the impact of the Fukushima
21 Daiichi accident was. It's 160,000 people evacuated
22 from their homes, some, most of them still to this day.
23 It's a significant land contamination event and it's an
24 event that at minimum estimates have shown will impact
25 the Japanese economy on the order of \$500 billion U.S.

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1 I think if I do my math correctly, that's 50 trillion yen.
2 And it's an accident that will leave a legacy of cleanup
3 and decontamination and decommissioning that will last
4 for decades," he said.

5 Chairman Jaczko continued, quote,
6 "Ultimately we have to change the mind-set about people
7 believing that accidents can happen. Before the
8 accident too many people believed in that mind-set, and
9 that is part of the challenge, part of the important need
10 to change as we go forward. Fundamentally, as I've
11 looked at this accident and as I've talked to people in
12 communities that surround nuclear power plants in the
13 United States, in Japan, it's become clear to me that we
14 need to think about safety in a whole new way. We need
15 to think about nuclear technology being used in a way that
16 cannot lead to evacuations, it cannot lead to land
17 contamination events. This is something that we
18 wouldn't accept in any other kind of technology. And
19 even though these events are anticipated and expected to
20 be extremely rare, they still can happen, and they did
21 happen at Fukushima Daiichi.

22 "So as we go forward and as we think about
23 nuclear technology and the use of nuclear technology,
24 it's time to completely remove the possibility of severe
25 accidents. That means a whole new way about looking and

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1 thinking about nuclear technology and it may mean
2 rethinking about the reactors that are in operation
3 today. This petition has challenged you, the Petition
4 Review Board 'to change the mind-set that accidents
5 cannot happen,' not to weigh continued operation and
6 probabilities but in the demonstrated unacceptable
7 performance and consequences of failure of this
8 containment design.

9 "The Petitioners urge this review board to
10 begin the rethinking by continuing to engage the public
11 through this petition the challenges, the continued
12 operation of this General Electric Fukushima-style
13 reactor with the demonstrated unreliable and
14 non-compliant reactor containment system.

15 "The NRC in its initial drafted
16 determination states that the petition raises issues
17 that have already been reviewed and evaluated by NRC.
18 Therefore, your petition meets the criteria for
19 rejection and requires no further review by the Agency.
20 The Board's determination to discontinue its review of
21 this petition relies on the assertion that the continued
22 operation of the GE Mark I and Mark II with the same
23 reliable containment as Fukushima Daiichi poses 'no
24 imminent risk to public health and safety' without
25 provided its reference documents for its conclusive

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1 analysis based in large part on a prediction that a severe
2 accident that challenges the vulnerable containment
3 system will not occur at U.S. reactors.

4 "It relies in part upon NRC document SECY
5 2012-0157 that initially recommended the adoption for a
6 prompt order to install severe accident-capable
7 containment vents with high capacity radiation filters
8 that was then voted down by a majority of the Commission
9 in favor of an order for containment venting
10 modifications for two hardened vents on the containment
11 components without radiation filtration systems that
12 will not be installed as protective features for a
13 minimum of five years on the wet well and six years on
14 the dry well.

15 "The Board provides no specific response to
16 any of the challenges raised in the petition or the
17 questions and concerns raised in the May 2nd public
18 meeting. In other words, the NRC rejects continued
19 public involvement and engagement in this emergency
20 enforcement action where current public health and
21 safety concerns continue to rely upon the same pressure
22 suppression containment system demonstrated at
23 Fukushima to have a 100 percent failure rate under severe
24 accident conditions while NRC and industry move to
25 exclusively engage to how, to what degree and at what cost

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1 they intend to restore some design requirement and
2 licensing agreements that are the focus of this public
3 petition.

4 "Given the evidence of this Agency's strong
5 inclination for failing to meet its own deadlines for
6 closing out decades-old open public health and safety
7 issues such as fire protection for safe reactor shutdown
8 systems and protecting recirculation for emergency core
9 cooling systems following a severe accident, there is no
10 reason for confidence in completion of the hardened
11 containment vents without radiation filtration systems
12 by 2018 and 2019. The public should be allowed to
13 continue to independently and constructively engage the
14 Agency's formal processes."

15 Next slide, please. "As established by
16 Chapter 10 of the United States Code of Federal
17 Regulations, Part 50, Appendix A, the General Design
18 Criteria states, 'these general design criteria
19 establish a minimum requirement for the principal design
20 criteria for water cooled nuclear power plants similar
21 in design and location to plants for which construction
22 permits had been issued by the United States," end quote.

23 The March petition contends that these
24 minimum requirements include compliance with Criterion
25 16 for the unreliable GE Mark I and Mark II containment

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1 system. Criterion 16 reads, "Containment design.
2 Reactor containment and associated systems shall be
3 provided to establish an essentially leak-tight barrier
4 against the uncontrolled release of radioactivity and to
5 assure that the design conditions important to safety are
6 not exceeded as long as the postulated accident
7 continues." In the event of a severe accident the GE
8 Mark I and Mark II pressure suppression systems do not
9 provide with a reasonable level of confidence an
10 essentially leak-tight barrier against the uncontrolled
11 release of radioactivity into the environment.

12 In addition to the widespread land
13 contamination from the initial reactor meltdown and
14 breaches of containment at Fukushima Daiichi numerous
15 news accounts include TEPCO and the Japanese
16 government's failure to stop the ongoing release of
17 radioactive contamination of ground water flowing from
18 the reactor site in what can only be described as the
19 uncontrolled release of radioactivity to the
20 environment.

21 The Petitioners have previously presented
22 a lack of assurance that in the event of a severe accident
23 operator actions in response to such events such as the
24 core breach of the pressure vessel will create pathways
25 for radioactive releases when the dry well is flooded

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1 such that the venting through the current hardened wet
2 well system and radioactivity scrubbing is going to be
3 precluded. The Petitioners have also previously
4 presented the issue of containment bypass in both the
5 Mark I and Mark II containments that can lead to
6 unfiltered radioactive releases to the atmosphere, yet
7 the NRC determination to suspend its review provides no
8 response and is silent on how these issues and
9 vulnerabilities impact public health and safety with the
10 current operations today.

11 As the Petitioners have presented, however,
12 the current NRC Enforcement Action 2013-0109, which
13 implements the 2018 and 2019 hardened vent completion
14 schedule for these unreliable Mark I and Mark II
15 containment systems, does not require any implementation
16 or installation of an enhanced radiation filtration
17 system to comport with General Design Criteria 16 other
18 than to pursue it through an indeterminate rulemaking
19 process rooted in a cost benefit analysis.

20 Next slide. Yet in contrast to NRC Order
21 Enforcement Action 2013-0190, which accommodates the
22 continued operation of U.S. GE boiling water reactors
23 with a minimum six-year timeline for designing and
24 installing a hardened vent system without an enhanced
25 radiation filter as a provision of restart for Japanese

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1 boiling water reactors, the nuclear regulatory authority
2 has issued a specified set of countermeasures to severe
3 accidents that include severe accident-capable hardened
4 containment vents with external high-capacity radiation
5 filtration systems. And this is noted in the outline of
6 the new regulatory requirements for light water
7 reactors, April 2013 severe accident measures
8 requirements as part of the NRA's ongoing enforcement of
9 nuclear regulatory requirements for commercial nuclear
10 power plants.

11 And we also note here; next slide, that the
12 -- what you're looking at is essentially the hardened
13 vent severe accident-capable with a high-capacity
14 radiation filtration system which is now under
15 construction or at ground breaking for 14 boiling water
16 reactors in the United States. And this is part of the
17 follow-on effort that AREVA and Hitachi GE have
18 undertaken in a June 2013 press announcement. But it is
19 our understanding that the Shimane nuclear units 1 and
20 2, including the Mark I there, will have a hardened severe
21 accident-capable vent with a radiation filtration system
22 to be completed by 2014. The Shika BWRs, including the
23 Mark I there, is to be completed by 2015 and additional
24 ground breaking activities at Tokai 2, Hamaoka, the
25 Higashidori and Onagawa and the Kashiwazaki-Kariwa units

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1 where we have the hardened vents underway as a part of
2 the restart protocol.

3 So while Japanese nuclear reactors are
4 being required to install as countermeasures these
5 hardened filtered containment vents for completion as
6 early as 2014, U.S. reactors continue to operate with NRC
7 permission and allowed to stall for a minimum of six years
8 the same backfit without filters on identical
9 technology. In our view we believe this to be an effort
10 to avoid a safety-related cost consequence on already
11 economically marginal power plants.

12 Next slide, please. We would also draw the
13 Board's attention to Criterion 50. You're quite
14 familiar with this as the containment design basis that
15 requires that the reactor containment structure shall be
16 designed so that the containment structure and its
17 internal components can accommodate without exceeding
18 the design leakage rate and without sufficient margin the
19 calculated pressure and temperature conditions
20 resulting from any loss of coolant accident.

21 The operative word here in Criterion 50 of
22 course is that the containment design shall
23 "accommodate" the pressures and temperatures generated
24 by loss of coolant accident. In any other context
25 "accommodate" is defined to mean to provide and have room

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1 for, and in the context of nuclear power and the public
2 health and safety, to provide a place to stay for
3 radioactivity generated in a severe accident and reactor
4 core damage. However, the Mark I and Mark II pressure
5 suppression system is not expected to accommodate the
6 loss of coolant accident pressure and temperature.
7 Without venting the undersized containment, in order to
8 make room for increasing temperature, pressure and
9 explosive hydrogen gas which brings the public's
10 attention back to General Design Criterion 16 and the
11 lack of compliance with the requirement for an
12 essentially leak-tight barrier against the uncontrolled
13 release of radioactivity.

14 Next slide, please. In addition to
15 Fukushima the failure to accommodate public health and
16 safety has another infamous historical context. The
17 White Star Line, the operator of the RMS *Titanic*, based
18 in a cost-cutting exercise and faulty assumptions that
19 the luxury liner was imperishable and that catastrophe
20 was so highly improbable that the company decided it
21 would only need to carry 20 lifeboats to accommodate its
22 passengers and crew of 2,207 on the maiden voyage.
23 Practically ever school-aged child is familiar with this
24 example of the failure to accommodate enough public
25 health and safety in the preparation for even the most

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1 remote and improbable tragedy.

2 The current NRC Action Order EA 2013-109
3 does not provide for compliance with the general design
4 criteria and minimum requirements do not order or provide
5 for the amplification of the general design criteria in
6 the aftermath and consequence of the Fukushima Daiichi
7 nuclear accident.

8 So we ask who is being accommodated by the
9 Agency's current half-measures and slow walk to address
10 the unreliable containment issue. We urge you not to be
11 part of this mind-set about people believing that
12 accidents can't happen. As your own former NRC Chairman
13 Gregory Jaczko has now warned, we urge you to rethink,
14 reconsider and accept this petition for emergency
15 enforcement action for the requested action to revoke the
16 operating license of all GE Mark I and Mark II boiling
17 water reactors. Thank you.

18 And we'll now hear from Jim Judson.

19 MR. JUDSON: Hi. Thanks. So I would like
20 to address some broader concerns about the way that the
21 NRC has been treating the questions regarding Mark I and
22 II boiling water reactors in the post-Fukushima
23 environment. And in particular, you know, I think the
24 Petitioners recognize that the industry is -- you know,
25 that these regulatory decisions are not happening in a

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1 vacuum, and in fact are happening, you know, in a period
2 of what's, you know, beyond the questions raised by the
3 Fukushima accident, which, you know, really is sort of
4 a historical, you know, sort of financial crisis that the
5 industry is in at the moment. And we're very concerned
6 about the way that the NRC is taking up these issues in
7 that context.

8 In particular, you know, we appreciate that
9 NRC has various directives and imperatives by which it
10 takes regulatory action and balances the need for sort
11 of enhancing public safety and protecting the public
12 health with competing concerns regarding issues, you
13 know, such as regulatory burden to the industry that it
14 regulates.

15 Our concern is that the latter imperative
16 has completely overshadowed the former in the way that
17 the decisions are being made, and in particular the ways
18 in which the issues raised by our petition have been
19 treated. And in regard to that I would like to submit
20 some new information that's occurred since we initially
21 submitted the petition, which is a February 20th, 2013
22 report issued by UBS Investment Research, which is a
23 financial investment research firm, that covers, you
24 know, among other things the nuclear industry and has
25 been devoting a lot of attention to the economic

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1 circumstances of nuclear power plants given the type of
2 market dynamics that we see prevailing across the
3 country, an in particular in states, you know, where the
4 electric markets are deregulated. But I think what we
5 see is these same dynamics spreading into states that are
6 utility regulated on the basis of what they consider
7 reasonable costs for their rate payers to bear.

8 This February 20th report by UBS, which is
9 entitled, "In Search of Washington's Latest Realities:
10 D.C. Field Trip Take-Aways," was issued after
11 researchers at UBS visited with the Nuclear Regulatory
12 Commission and the Department of Energy regarding a
13 number of the issues that they see as, you know, sort of
14 critical pending issues confronting the nuclear
15 corporations that they monitor investments in.

16 In particular this report talks about the
17 NRC's inclinations in dealing with the hardened
18 containment vent issue in Mark I and Mark IIs, which Paul
19 referenced in his presentation. And they had this to say
20 regarding their anticipations of what NRC's action was
21 going to be on the hardened containment vent issue
22 following this meeting: And I quote here from the
23 summary on the first page of this report.

24 "A nearer-term mild positive is our belief
25 NRC is likely not to require filtered vents given their

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1 material expense early next week." As I said this report
2 was issued on February 20th, and as we know NRC the
3 following week or shortly thereafter did decide to back
4 off on requiring the installation of filters on
5 containment vents in Mark I and IIs.

6 They go on to discuss this in greater detail
7 on page 5 of this report under a section called, "Look
8 for a Decision on Filtered Vents Next Week. Expect
9 Positive for Generators." Quote, "We look forward to a
10 decision from the NRC next week on proposal to require
11 the installation of hardened filtered vents on all Mark
12 I and II units. We increasingly believe the NRC may not
13 require these added precautions given the added stress
14 this places on the incumbent portfolio with NRC staff
15 initially estimating these vents would cost \$15 million,
16 however, multiple other sources estimate the true cost
17 of such installation costs could be up to \$40 million per
18 unit. Given the quality of factors cited as part of the
19 cost-benefit analysis used to justify their retrofits,
20 as well as the fragile state of affairs among existing
21 units, it appears this effort does not meet the usual
22 rigor of a quantitative cost-benefit analysis used to
23 justify such investments."

24 No we recognize that this is not an NRC
25 document; this is a report, you know, by a party that the

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1 NRC met with, but we consider, you know, especially given
2 the accuracy of the prediction that UBS had about the
3 NRC's ultimate action on this issue that the underlying
4 rationale for the taking of that action is extremely
5 disturbing. And the reason in particular that it's
6 disturbing is that first of all the figures that are being
7 cited here, whether it's \$15 million or \$40 million, are
8 not in the way of enormous capital investments that are
9 typical in this industry. And in fact given the benefits
10 that would accrue to preventing the uncontrolled release
11 of radiation in an accident like we saw take place
12 multiple times at Fukushima in 2011, this is a very
13 reasonable cost for the expense that's been created as
14 a result of not having such reliable hardened containment
15 filtered vents.

16 But in particular the consideration of the
17 impact that these type of investments might have on the
18 industry at this particular time is extremely troubling
19 and we want the NRC, you know, to be able to reconsider
20 the way that it evaluates regulatory burden, in this
21 matter in particular, but other matters more broadly.

22 What I would like to distribute -- and I'm
23 sorry I didn't make enough copies for everyone at the
24 table. I wasn't sure how many NRC staff would be here.
25 But some charts detailing the exposure of the nuclear

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1 industry to the type of financial risks that are present
2 at this time.

3 There's two charts on this paper, you know,
4 looking more generally at the issue of how many nuclear
5 reactors in the U.S. are in states where the electricity
6 markets are deregulated. And in particular, the second
7 chart looks at the number of reactors, you know, that are
8 the subject of this petition that are also operating in
9 deregulated electricity markets.

10 What you see plainly is that the majority
11 of the reactors operating in this country; namely 57
12 percent, are operating in states with deregulated
13 electricity markets which are experiencing
14 unprecedented low market prices for electricity and
15 placing incredible pressure on the industry financially.

16 What you see in addition is that this
17 pattern is even more pronounced with respect to Mark I
18 and II reactors where 20 of the 31 Mark I and IIs in the
19 U.S. are operating in states where the electricity
20 markets are deregulated, or, in the case of Vermont
21 Yankee, are operating as a merchant reactor in a state
22 that hasn't deregulated.

23 The reason that we raise this is because,
24 you know, if the NRC is making decisions about safety
25 post-Fukushima and considering investments like \$15

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1 million, \$40 million, which as I said are, you know,
2 within the realm of what's typical within the industry
3 -- they're not outrageous costs for capital expenses in
4 the industry, but these are being cited as potential
5 risks for reactor closure, that the NRC really -- you
6 know, I mean it's very troubling if the NRC is actually
7 taking those circumstances into account and deciding not
8 to require safety improvements and to take these kind of
9 enforcement actions.

10 You know, these plants in these markets are
11 experiencing large structural deficits in their
12 operating expenses. The cash flow deficits that many of
13 these Mark Is are experiencing, notably Vermont Yankee,
14 which has recently been announced to close, but also
15 other reactors: Fitzpatrick, Pilgrim, Nine Mile Point
16 1, and again these other, you know, 16 other Mark I and
17 II reactors in deregulated states. Sort of the
18 regulatory bar is being lowered to a really frightening
19 level if the NRC is taking into account the economic
20 circumstances of this industry at this time in making
21 these kind of regulatory decisions. And we would urge
22 the NRC to not consider the regulatory burden of these
23 expenses in making these decisions going forward.

24 If the industry, you know, ends up closing
25 reactors because they can't afford to meet basic safety

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1 standards like those that are being required in Japan,
2 then in a certain sense that's the gamble the industry
3 accepted by moving into deregulation. I mean operators
4 like Exelon and Entergy entered into deregulated markets
5 and acquired fleets of reactors on that basis and this
6 is the risk that they assumed, and we did not expect when
7 that happened that the NRC would base regulatory
8 standards on the volatility of electricity market which
9 it doesn't even regulate itself.

10 MR. GUNTER: Thank you. Jessica Azulay,
11 AGREE?

12 MS. AZULAY: Yes, can you hear me?

13 MR. GUNTER: Speak a little louder.

14 MS. AZULAY: Can you hear me?

15 MR. GUNTER: Yes.

16 MS. AZULAY: Okay. Great. So my name is
17 Jessica Azulay. I'm calling in from Syracuse, New York
18 where I, along with about a million people, live within
19 50 miles of two Mark I boiling water reactors and one Mark
20 II boiling water reactor, which are all located in
21 Scriba, New York on the shore of Lake Ontario.

22 I represent the Alliance for a Green
23 Economy, a coalition of grassroots organizations in New
24 York who together represent thousands of New Yorkers
25 concerned about the risks posed by the nuclear plants in

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1 our state.

2 I'd like to thank the NRC for the
3 opportunity to speak today, and I'd also like to thank
4 Beyond Nuclear and my fellow nuclear watchdogs around the
5 country who are taking part in this very important
6 hearing.

7 We at the Alliance for a Green Economy have
8 reviewed the record on the Mark I and Mark II reactors.
9 We've looked at the NRC documents going back decades. I
10 have personally reviewed over 1,000 pages released
11 through a Freedom of Information Act request about the
12 containment and dangerous venting plans for the
13 FitzPatrick reactor, which is one of the Mark I boiling
14 water reactors in my region. We have carefully reviewed
15 the post-Fukushima reports from the NRC and the orders
16 NRC has given for installing and improving vents on
17 FitzPatrick, Nine Mile 1 and Nine Mile 2, and all the
18 other Mark I and Mark II reactors in the U.S.

19 This record clearly shows that the Mark I
20 and Mark II reactors by their original design do not
21 comply with the NRC's General Design Criterion 16 which
22 requires a reliable leak-proof containment to protect
23 the public from radiation exposure during an accident.
24 The record also clearly shows that this design flaw has
25 never been addressed in the Mark II reactors like Nine

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1 Mile Point 2. It was not fully addressed in the Mark I
2 reactors that installed vents in the early '90s like Nine
3 Mile Point 1 and it was not fully addressed at FitzPatrick
4 also here in Central New York, the only Mark I in the U.S.
5 that doesn't have a hardened vent to the stack, and
6 instead has a reckless plan to blow the doors off the
7 standby gas treatment building in order to create a
8 so-called vent cap if it's needed. So in their current
9 state none of the boiling water reactors in Central New
10 York meet General Design Criterion 16.

11 What's frustrating about this case is that
12 the NRC essentially agrees with us that right now these
13 reactors do not offer adequate protection from an
14 accident. And yet instead of true protection from the
15 very real threats of today we are offered the promise of
16 improvements tomorrow. And by tomorrow I mean five or
17 six years from now, and maybe even longer.

18 In the order EA 13-109 issued on June 6th
19 of this year, NRC states that implementation of new vent
20 requirements are, quote, "necessary to provide
21 reasonable assurance of adequate protection on the
22 public health and safety." The order also states that
23 one of the factors that led to the order is to enhance
24 the Mark I and Mark II containments, quote, "by
25 addressing the relatively high probabilities that those

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1 containments would fail should an accident progress to
2 melting the core," unquote.

3 Later in the same document it is again
4 reiterated that, quote, "these modifications are needed
5 to protect public health and minimize danger to life or
6 property because they will give licensees greater
7 capabilities to respond to severe accidents and limit the
8 uncontrolled release of radioactive materials,"
9 unquote.

10 Lest you accuse me of taking these quotes
11 out of context, I will note that in the same order it says,
12 quote, "The NRC staff has determined that continued
13 operation does not pose an imminent risk to public health
14 and safety." But then in the same sentence it says,
15 "However, the additional requirements outlined in EA
16 13-109 are necessary in light of insights gained from the
17 events at Fukushima Daiichi.

18 I'm sure you can understand that these
19 seemingly contradictory statements are incredibly
20 confusing and frustrating to people like me who are
21 trying to understand the risks in our communities. How
22 can you say that these reactors are safe to operate now,
23 but that the new vents you'll require are, quote,
24 "necessary to provide reasonable assurance of adequate
25 protection to the public health and safety in light of

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1 the events at Fukushima?" It doesn't make any sense.

2 The first part of this contradictory
3 statement that these reactors don't pose an imminent
4 threat is offered as one of your justifications for
5 denying our petition. The statement is negated by the
6 mountain of evidence going back decades and by the NRC's
7 own justification for requiring yet more upgrades trying
8 to fix the flaws in the design.

9 You might say that NRC is addressing our
10 concerns through another process, the process by which
11 you'll require new vents to be installed on the plants
12 in question. But one of the main reasons we filed this
13 emergency enforcement petition is because the process is
14 allowing dangerous reactors to stay online and continue
15 to threaten us right now and for the foreseeable future,
16 for the several years it will take before the upgraded
17 vents are actually installed, if they even are installed
18 on the schedule that you've laid out.

19 Meanwhile, there's been a decision by the
20 Commission so far not to require filters on the vents to
21 protect us from radiation if the vents have to be used
22 once they're installed, which means these new vents will
23 not bring the plants up to regulatory compliance on a
24 leak-proof containment.

25 You can also understand that we are

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1 skeptical over whether these new so-called reliable
2 vents will be truly reliable since the last round
3 recommended by NRC proved not reliable at Fukushima in
4 their first real world test. These issues are at the
5 heart of your petition.

6 There is a saying that justice delayed is
7 justice denied. I believe similarly protection delayed
8 is protection denied. The NRC's job is to protect us
9 from the possibility that something could go wrong at one
10 of these reactors. It is not controversial at this point
11 to say that NRC itself admits that nuclear technology is
12 not perfect and that things do sometimes go wrong and that
13 accidents can happen even if they're unlikely. That's
14 why a reliable leak-proof containment is required by law
15 in all operating nuclear reactors.

16 This is not a hypothetical scenario for me
17 and my neighbors. Just last week we found out that due
18 to a fairly small human error and inadequate procedures
19 in April of 2013 Nine Mile Point lost power to its cooling
20 mechanisms and came within less than two hours of boiling
21 and within nine hours of fuel exposure that could have
22 led to a meltdown. And because containment was not
23 functional at the time due to refueling activities, NRC
24 was not sure there would have been enough time to evacuate
25 if the accident had progressed. This is a reminder to

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1 all of us how important regulation on containment is and
2 how every day we live exposed to the risk of a nuclear
3 accident that could destroy Upstate New York. We're
4 asking you to shut these plants down before that happens.

5 Your regulation doesn't say that a reliable
6 leak-proof containment should be planned to be in place
7 at some point in the future to protect us from accidents.
8 It says reactor containment and associated systems shall
9 be provided to establish an essentially leak-proof
10 barrier against the uncontrolled release of
11 radioactivity to the environment.

12 In recommending that our petition be
13 rejected you have offered no evidence that a leak-proof
14 containment exists for these plants in today's reality,
15 nor have you assured us that we will have truly leak-proof
16 containment in the future. You have only offered us the
17 promise that in several years we might get an improvement
18 to the currently unreliable vents. This is protection
19 delayed and protection denied. I strongly urge you to
20 reconsider your initial recommend and accept our
21 petition for review. Thank you.

22 MR. GUNTER: Thank you, Jessica. We'll
23 now hear from Lewis Cuthbert.

24 CHAIRMAN DAVIS: Before you do could you
25 ask whoever doesn't have their phone muted to please mute

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1 it, because there's a lot of interference on the line
2 right now.

3 MS. LEWISON: And also, Paul, this is Linda
4 Lewison in Chicago, that I am online. Can you --

5 MR. GUNTER: Okay. Very good.

6 MS. LEWISON: Can you hear me?

7 MR. GUNTER: Yes, we can.

8 MS. LEWISON: Okay.

9 MR. GUNTER: But we would like not to hear
10 the background noise. Can you all please mute your
11 lines? Star 6. Star 6, please. Thank you.

12 We still have somebody online without their
13 mute and with background noise. Please mute your line.

14 DR. CUTHBERT: Hi, can you hear me?

15 MR. GUNTER: Is this Lewis?

16 DR. CUTHBERT: Yes, it is, Paul.

17 MR. GUNTER: Go ahead, Lewis. And thank
18 you for whoever muted their line.

19 DR. CUTHBERT: Okay.

20 MR. GUNTER: Proceed.

21 DR. CUTHBERT: Good afternoon. Thank you
22 for the opportunity to share some perspective and
23 comments on behalf of the community that surrounds the
24 Limerick Nuclear Generating Station in Limerick,
25 Pennsylvania. My name is Dr. Lewis Cuthbert. I'm the

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1 president of ACE, the Alliance for a Clean Environment.

2 After 14 years of investigating Limerick
3 Nuclear Plant, the Alliance for a Clean Environment has
4 compiled a body of evidence that strongly supports the
5 Beyond Nuclear petition from Paul Gunter --

6 MR. GUNTER: Lewis?

7 DR. CUTHBERT: Yes?

8 MR. GUNTER: Are you still there? Okay.
9 I was just checking.

10 DR. CUTHBERT: Yes, I am. Shall I continue
11 or start again, Paul?

12 MR. GUNTER: Proceed.

13 DR. CUTHBERT: Okay. After 14 years of
14 investigating Limerick Nuclear Plant, the Alliance for
15 a Clean Environment has compiled a body of evidence that
16 strongly supports the Beyond Nuclear petition from Paul
17 Gunter calling for the emergency closure of GE boiling
18 water reactors.

19 Limerick's Mark II reactors have dangerous
20 and unreliable containment structures similar to those
21 that melted down at Fukushima. Limerick clearly
22 presents undue and unacceptable risk to public health,
23 safety and the environment. Radioactivity released in
24 an accident at Limerick could destroy the health and
25 lives of millions of people living in the greater

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1 Philadelphia region. Over 8 million people live within
2 50 miles of Limerick. We cannot evacuate safely.

3 NRC's failure to require immediate
4 installation of vents with filters has been negligent
5 beyond belief, especially when NRC's own staff said vents
6 without filters could become a radioactive fire hose in
7 the sky and that filtered vents should be installed
8 regardless of the cost to industry.

9 Many structural flaws at Limerick Nuclear
10 Plant were defective from the beginning and cannot be
11 fixed. NRC is sweeping serious problems under the rug
12 further risking unnecessary radioactive catastrophe.
13 NRC is failing to address Limerick's flawed design issues
14 as well as its history of multiple reactor shutdowns,
15 many of which are unexplained, plus other serious
16 problems and violations.

17 Commissioner Borchardt's June 25, 2013
18 letter to ACE suggests that the NRC is not taking risk
19 of meltdown at Limerick or threats to public health and
20 safety seriously enough. In a 21-page response letter,
21 8/5/13, to Commissioner Borchardt ACE identified a body
22 of evidence showing why NRC cannot guarantee public
23 safety from Limerick operations and why NRC should close
24 Limerick. NRC repeatedly accommodates Exelon's
25 financial interests but further jeopardizes public

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1 health and safety in the process. Major issues
2 for our community include the following: Exelon
3 repeatedly fails to comply with NRC regulations at
4 Limerick. Then NRC weakens regulations and amends
5 Limerick's operating licenses based on Exelon's outdated
6 and faulty assumptions even though Exelon's self-serving
7 claims are often contraindicated by their own reports to
8 NRC. Exelon did not provide testing that proved
9 Limerick's two reactors have not already become
10 dangerously brittle enough to either crack or shatter.

11 After 28 years of operation there are
12 serious reactor issues not adequately addressed to
13 assure there will not be a loss of coolant accident that
14 could lead to a meltdown. In fact, risks are increasing.
15 Limerick's upgrades have increased reactor dome pressure
16 and corrosion levels, according to GE. Limerick is also
17 using new more powerful GE fuel which produces more
18 radiation, more heat and more stress on aging equipment.

19 Limerick's boiling water reactors involve
20 un-correctable degradation. The nuclear industry
21 itself admitted reactors are too costly to replace. On
22 June 1, 2011, a petition was filed against Exelon about
23 Limerick's repeated shutdown problems and serious
24 reactor and system degradation. NRC dismissed it.

25

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1 Limerick's shutdown safety valves and
2 control rods may not operate reliability to prevent
3 meltdowns. That is unacceptable. Limerick's spent
4 fuel pools, like those at Fukushima, are dangerously
5 located on top of reactors, but Limerick's radioactive
6 risks are worse. Pools are packed far beyond design
7 capacity and documented to have been constructed with
8 sub-standard cement.

9 NRC documented corrosion and loss of
10 thickness in Limerick's fuel pools at rates far higher
11 than original calculations. Pitting corrosion was 2 to
12 10 times higher than general corrosion. Exelon
13 requested a delay of over a decade to recoat the pools
14 even though NRC told Exelon that to delay fuel pool
15 recoating was unacceptable. Inexplicably NRC caved and
16 revised Limerick's regulations allowing Exelon to delay
17 recoating for more than a decade.

18 There is an earthquake fault under Limerick
19 with four others within 17 miles. The recent Virginia
20 earthquake triggered seismic reactor alarms at Limerick,
21 and the risk to Limerick was misleading because some
22 monitors were not operable.

23 And finally, Limerick is surrounded by one
24 of the most densely populated areas in the nation and
25 cannot be safely evacuated. In 1980, NRC stated that

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1 Limerick had double the population density within 30
2 miles considered safe for evacuation even back then.
3 Now population density is four times that number.
4 Montgomery County officials in Pennsylvania expressed
5 concerns to NRC about the impossibility of safe
6 evacuation due to a lack of and inadequate
7 infrastructure. Exelon's 2012 evacuation time estimate
8 for Limerick is both highly unrealistic and unworkable.

9 And in conclusion I'd like to suggest on
10 behalf of millions of residents near and around the
11 Limerick Nuclear Generating Station that we believe the
12 evidence shows why it is imperative for NRC to revoke
13 Limerick Nuclear Plant's operating licenses and we ask
14 that all other Mark I and II reactors currently in
15 operation in the United States also close at the
16 direction of the NRC. Thank you for your consideration.

17 MR. GUNTER: Thank you, Lewis. Let's see,
18 before we hear from the next speaker I have been passed
19 a note that I misspoke in my testimony and that I stated
20 that there were 14 BWRs in the United States that were
21 undergoing the filtered vent. And my intent is to
22 correct the record to say that those were 14 BWRs in
23 Japan. So thank you.

24 Okay. We have background noise on the line
25 again. Can you please mute if you're not on as a speaker?

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1 Can you please mute your line? Star 6.

2 Can we hear from Chuck Johnson with
3 Washington/Oregon PSR?

4 MR. JOHNSON: Yes, thank you. My name is
5 Charles K. Johnson and I'm the director of the Joint Task
6 Force on Nuclear Power for the Oregon and Washington
7 chapters of Physicians for Social Responsibility. My
8 comments follow on the previous comments in the May
9 public hearing of John Pearson, M.D., our Oregon PSR
10 chapter president.

11 Thank you for the opportunity to present to
12 the Nuclear Regulatory Commission regarding the issue of
13 the demonstrably inadequate containment structures
14 designed into the GE Mark I and Mark II nuclear power
15 reactors proven to be vulnerable to failure by the
16 multiple accidents in Fukushima, Japan and the plan to
17 allow unfiltered vented radioactive effluent from the
18 reactors to be pipelined into communities surrounding
19 them in the case of a worst case accident.

20 As it's been pointed out by Beyond Nuclear
21 and the rest of the co-signing groups in the petition for
22 revocation of the licenses for these inherently
23 dangerous reactors, this plan for dealing with severe
24 accident conditions will deliberately defeat the
25 licensed condition for maintaining public health and

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1 safety through defense-in-depth protective reactor
2 systems including, quote, "an essentially leak-tight
3 valve against the controlled release of radioactivity to
4 the environment," end quote, associated with the
5 occurrence of reactor core fuel damage.

6 Further, as previously stated, this
7 constitutes violations of these reactors' licensed
8 condition as required under 10 C.F.R., Appendix A,
9 General Design Criteria 10 and 16, and the operating
10 licenses should therefore be revoked.

11 We would like to emphasize three points
12 specific to our own reactor of concern, the Columbia
13 Generating Station, also known as the Washington Nuclear
14 Plant No. 2, located on the Hanford Nuclear Reservation
15 along the Columbia River 10 miles north of Richland,
16 Washington, each of the potential pathway by which an
17 accident could occur that is sufficient to cause the plan
18 for emergency breach of containment envisioned by the NRC
19 policy when it decided to allow the Columbia Nuclear
20 Plant to construct unfiltered vents to its GE BWR Mark
21 II containment design reactor which would intentionally
22 release radionuclides in quantities well beyond what the
23 plant is licensed to release into the surrounding
24 communities and the Pacific Northwest as a whole.

25 These three points are: (1) Geological

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1 knowledge of the region has improved immensely with U.S.
2 Department of Energy studies showing that ground motion
3 in an earthquake is now potentially three times greater
4 than was known and planned for when the Columbia Nuclear
5 Plant was built; (2) volatile nuclear facilities exist
6 nearby on the Hanford Nuclear Reservation that could also
7 release large quantities of radioactive material in an
8 earthquake, a terrorist attack or a human-caused
9 accident which could cause the plant site to become so
10 radioactively hot that operators might be at immediate
11 health risk which could lead to an accident at the
12 Columbia Plant; and (3) a breach of the Grand Coulee Dam
13 would result in power cuts to the site that could last
14 for many days, would include the destruction of power and
15 water intake structure, roads and entire cities in the
16 path of a giant wall of water which would inundate the
17 base of the ultimate heat sink in the Columbia Nuclear
18 Plant itself.

19 Beginning with point No. 1, I would like to
20 note that the Oregon and Washington chapters of
21 Physicians for Social Responsibility sent a letter to the
22 NRC Chairwoman, Allison Macfarlane, on July 4th, 2013.
23 It outlined our concerns about the adequacy of the
24 Columbia Nuclear Plant to withstand an earthquake in
25 light of geological research for a federal high-level

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1 waste treatment facility less than 10 miles from the
2 plant that has now been required to meet ground motion
3 standards three times those that the Columbia Nuclear
4 Plant was designed to meet. The new earthquake data
5 available on the Hanford Nuclear Reservation was not
6 considered during the May 2012 relicensing of the
7 Columbia Nuclear Plant because it was said to be part of
8 the, quote, "ongoing regulatory oversight," end quote.

9 We've not had a reply from Chairwoman
10 Macfarlane or the NRC to our request for a meeting with
11 her. To date the NRC has not explained their
12 unconscionably lax, quote, "regulatory oversight," end
13 quote, of the impact of new geologic data some of which
14 has been widely known to Washington State geologists for
15 over a decade.

16 The original assessment of the plant site
17 in 1981 found that there was a low annual probability of
18 exceedance, 0.00011, of the 0.025 g laboratory ground
19 motion threshold of the safe shutdown earthquake for the
20 Columbia Nuclear Plant. It was licensed on that basis
21 and this assessment has not been changed since.

22 In the 30 years since the plant was licensed
23 there have been numerous geologic investigations on the
24 Hanford Reservation and surrounding region conducted by
25 the U.S. Geological Survey, federal contractors, PNNL,

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1 Pacific Northwest National Laboratory, the State of
2 Washington, and universities. The outcomes of these
3 studies have piled up the geologic evidence that
4 indicates the original Columbia Nuclear Plant's seismic
5 risk assessment significantly underestimated the
6 potential risks to the reactor and associated
7 structures.

8 Among the evidence so far not considered by
9 the NRC regulators to our knowledge is the following:
10 More detailed mapping of folds and faults in the region
11 surrounding the Columbia Nuclear Plant site now exist.
12 The folds and faults considered in the original seismic
13 risk assessment have significantly longer lengths and
14 evidence of being geologically young indicating
15 relatively recent earthquakes. Longer fault lengths
16 also indicate that these longer faults may be capable of
17 producing much larger magnitude earthquakes.
18 Additional Yakima fold and thrust belt structures were
19 identified that could pose an earthquake risk to the
20 Columbia Nuclear Plant, including Frenchman Hills,
21 Manastash Ridge, Toppenish Ridge, Columbia Hills, Hog
22 Ranch-Naneum Ridge and Hite Fault.

23 The potential significance and importance
24 of a magnitude 6.5 to 7.4, quote, "1872 earthquake," end
25 quote, the largest historical earthquake to hit the

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1 region, to the seismic risk analysis of the Columbia
2 Nuclear Plant was greatly reduced because the assumed
3 location of the epicenter for this event was more than
4 180 miles away than was determined by Bakun et al in 2002.
5 The revised location for the epicenter at the southern
6 end of Lake Chelan is approximately 99 miles from the
7 Columbia Nuclear Plant, rather than an additional 180
8 miles away as was believed at the time that they set the
9 standards for the plant.

10 Subsequent seismic risk assessments
11 performed by the U.S. Department of Energy for the
12 Hanford site that factored in newly available structural
13 geology data and generated estimates at peak vibratory
14 ground motions were significantly higher than those used
15 to establish the Columbia Nuclear Plant's license in
16 1981. The Geomatrix study in 1996 established peak
17 vibratory ground motion of 0.50 g on the Hanford site 10
18 miles from the Columbia Nuclear Plant, double that of the
19 estimate of the Columbia Nuclear Plant license.

20 New information about earthquake hazards
21 since Geomatrix forced the U.S. Department of Energy to
22 suspend work on their waste treatment plant, WTP,
23 facility to allow for new data collection and updated
24 seismic risk assessment. Three studies, Youngs, 2007;
25 Rohay and Brouns, 2007; Rohay and Reidel, 2005,

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1 determined that the previous vibratory ground motion
2 estimate needed to be increase to 0.8 g causing the U.S.
3 Department of Energy to order significant modification
4 to the WTP facility. That's three times larger than the
5 Columbia Nuclear Plant was required to meet. That
6 facility is 10 miles away from that plant.

7 A July 2010 letter from the Nuclear
8 Regulatory Commission to the operator of the Columbia
9 Nuclear Plant, Energy Northwest, requested that they
10 address their concerns that the most recent seismic risk
11 study in 1995 for the Columbia Nuclear Plant failed to
12 address more recent geologic findings and increased
13 seismic risk as determined for the WTP facility. Energy
14 Northwest replied that the Columbia Plant was, quote, "an
15 increased distance from the nearby seismic sources and
16 had different sub-surface geology conditions." These
17 conclusions are not born out by geological observation
18 in any study today, and yet the NRC has not required any
19 modification be made to the Columbia Nuclear Plant to
20 address the increased risk from the strong seismic
21 vibratory ground motion. In 2011, the U.S.
22 Geological Survey published a paper that will likely
23 fundamentally change several key assumptions that past
24 seismic risk assessments were based upon. The USGC
25 found that the maximum length of some of the Yakima fold

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1 and thrust belt structures have been previously
2 underestimated. Their paper focused on the Umtanum
3 Ridge which they were able to trace through the Cascade
4 Range where it merges with active faults in the Puget
5 Sound area. The Umtanum Ridge structure, which
6 terminates less than five miles north of the Columbia
7 Nuclear Plant, went from 77 miles to more than 124 miles
8 in length, greatly increasing the known potential for
9 large earthquakes.

10 They found that the structure of the Umtanum
11 Ridge was deeper than previously assumed and can produce
12 larger magnitude quakes as a result. They found
13 evidence that the Umtanum Ridge of trenching surface
14 scarps indicating that this structural feature may be
15 more seismically active than previously believed. This
16 new information will be factored into the new
17 probabilistic seismic hazard analysis being conducted by
18 the U.S. Department of Energy for the Hanford site
19 scheduled to be completed in 2014.

20 None of this new information has been addressed by Energy
21 Northwest and yet the Nuclear Regulatory Commission
22 allows them to continue to operate the Columbia Plant at
23 full power under their clearly inadequate original
24 licensed earthquake standards.

25 So far in response to the post-Fukushima

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1 requirements Energy Northwest has in its walk-down in
2 April of 2011 of the Columbia Nuclear Plant determined
3 that they do not even meet these inadequate standards
4 finding that, quote, "the licensee determined that the
5 emergency response facilities, the power makeup system
6 and the fire protection systems were not seismically
7 qualified," end quote. And that, quote, "floor drain
8 isolation valves and sump level switches used to mitigate
9 internal flooding were not seismically qualified," end
10 quote.

11 Another seismic walk-down in November 2012
12 showed a total of 109 potentially seismic adverse
13 conditions. To date we have nothing in writing to show
14 that these problems have been addressed and that they
15 have met the already inadequate 1983 standards.

16 Regarding point No. 2, the potential
17 interactivity of an accident on the Hanford Nuclear
18 Reservation, it should be noted that nine nuclear
19 reactors and four reprocessing plants at Hanford produce
20 nearly two-thirds of the plutonium used in the United
21 States for government purposes.

22 These site operations also created a large
23 volumes of radioactive and chemical waste. Some
24 contaminants were released into the environment exposing
25 people who live downwind and downstream. Other

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1 contaminants were stored. The last reactor was shut
2 down in 1987 and the last reprocessing plant closed in
3 1990. Most of the human-made radioactivity and about
4 half of the chemicals remaining onsite are kept in
5 underground tanks and surface facilities. The rest
6 exist in the soil, groundwater and burial grounds.

7 Hanford contains about 40 percent of all of
8 the radioactivity that exists across the nuclear weapons
9 complex. More than 1,600 waste sites have been
10 identified on Hanford. Contained waste is held inside
11 structures such as underground tanks, buildings and
12 concrete basins. There are more than 500 waste
13 facilities at Hanford.

14 The primary threats of large-scale
15 radioactive contamination that could become an immediate
16 health hazard to Columbia Nuclear Plant workers are:

17 (1) The K basins near the closed K reactors in which a
18 shallow pond prevents deteriorated used fuel rod
19 material from catching fire and sending a cloud of
20 intense radiation across the Hanford site. If the pool
21 were to crack and drain, it would take minutes for a fire
22 to break out threatening workers throughout the site and
23 citizens beyond it.

24 (2) the waste encapsulation storage
25 facility, WESF, which contains 1,936 stainless steel

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1 capsules holding 130 million curies of radioactive
2 cesium and strontium plus their decay products. These
3 are kept in water-filled pools in the WESF adjoining B
4 plant in the 200 area. These capsules have the largest
5 concentration on earth of strontium-90 and cesium-137,
6 are more radioactive than spent fuel and are held in a
7 50-year-old pool with no safety backups and no pretense
8 of containment. This pool is not rated to withstand even
9 a mild earthquake.

10 (3) The waste treatment plant, also
11 referred to as the Vitrification Plant, or Vit Plant, is
12 being built at Hanford to harden chemical and radioactive
13 tank wastes left from the plutonium extraction from spent
14 nuclear fuel. It has been delayed for seismic study, as
15 previously mentioned, but also due to whistle blower
16 complaints that the plant may be subject to hydrogen and
17 criticality explosions that could release large amounts
18 of life-threatening radioactive material onto the site
19 and the surrounding community.

20 The Hanford Nuclear Reservation contains
21 330 million curies of total radioactivity, less than the
22 361 million curies of total radioactivity at the Columbia
23 Plant site, but almost double the amount of radioactivity
24 available for release.

25 As mentioned above, some of these curies are

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1 contained in materials that are not stored in a way that
2 could guarantee they are not subject to a catastrophic
3 release. If an earthquake, fire, terrorist attack,
4 human or mechanical error caused a catastrophic release,
5 it may force workers to leave the Columbia Nuclear Plant
6 facility in order to prevent an immediate loss of life
7 putting the plant itself at risk for a catastrophic
8 accident.

9 Finally, the threat of flooding at the site
10 must be considered as potential accident pathway. The
11 NRC's own studies, most recently the final safety
12 analysis report of the Columbia Generating Station in
13 December of 2012, of the potential for a catastrophic
14 Grand Coulee Dam terrorist attack scenario would put the
15 city of Richland under a 15-foot wave of swiftly churning
16 water and debris wiping out power infrastructure and all
17 water intake equipment from along the Columbia River.

18 The Columbia Nuclear Plant site is located
19 far enough above the river that it would avoid complete
20 inundation, but the backup water supply, the ultimate
21 heat sink contained in pools slightly below grade from
22 the reactor and turbines would be grazed by the high water
23 point possibly doing damage to the structural integrity
24 as well. The combination of a lack of off-site power for
25 an extended period of time, the cut off of the primary

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1 water source and potential threat to its backup and the
2 massive destruction of local infrastructure, roads,
3 bridges, human organizational systems could lead to a
4 lack of power, water or both to continue the critical
5 cooling of the reactor core. We know from Fukushima what
6 that situation leads to with a GE BWR Mark I or Mark II
7 containment.

8 A letter from NRC employee Richard H.
9 Perkins, PE of the Division Risk Analysis Office of
10 Nuclear Reactor Regulation, dated September 14, 2012 to
11 the NRC's Office of the Inspector General, exposes the
12 concealment of this, quote, "significant nuclear safety
13 information from the U.S. Nuclear Regulatory
14 Commission." The Columbia Nuclear Plant was one of the
15 plants named as threatened in the suppressed study
16 entitled, quote, "Flooding of U.S. Nuclear Power Plants
17 Following Upstream Dam Failure."

18 As has been observed by many nuclear
19 experts, the location of Fukushima next to the ocean and
20 the fact that the wind carried much of the radioactivity
21 from the explosions there out to sea diluted a large
22 amount of the exposure to humans and terrestrial life.
23 No such protection exists on river-based nuclear plants
24 like the Columbia Nuclear Plant. A Fukushima-style
25 accident there would be born by the wind over land and

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1 water-related impacts would be felt by downstream river
2 uses for centuries.

3 In summary, in the case of the Columbia
4 Nuclear Plant there are potential pathways for the same
5 type of catastrophic containment breaching accidents
6 that occurred in Japan in 2011. These pathways are more
7 likely than the NRC and the reactor operator have been
8 willing to officially acknowledge to date. The plan to
9 place unfiltered vents on the Columbia Nuclear Plant's
10 containment system constitutes a basic violation of NRC
11 requirements for viable containment in order to safely
12 operate a nuclear power plant. For this reason the
13 Columbia Nuclear Plant and all other plants with the same
14 or similar containment systems should be closed
15 immediately until they can be shown to have containment
16 systems that do not violate NRC requirements. Thank
17 you.

18 MR. GUNTER: Thank you, Chuck.

19 Mary Lampert? And we are 2:15, so we have
20 until 3:00. Okay.

21 MS. LAMPERT: Okay. Hi, this is Mary
22 Lampert, Pilgrim Watch, keeping an eye on the Pilgrim
23 Nuclear Power Plant.

24 We strongly object to the preliminary
25 statements that we are in no immediate danger. That is

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1 on its face an absurd statement.

2 We know NRC does not have a crystal ball and
3 we can look at the facts brought forward by Tim Judson
4 and the petition I'm a part of that the economic situation
5 of boiling water reactors in deregulated markets is such
6 they cannot --

7 (Technical interruption.)

8 MS. LAMPERT: Hello?

9 MR. GUNTER: Go ahead, Mary.

10 MS. LAMPERT: They cannot compete with
11 cheaper available sources of electricity. And why this
12 presents a particular danger is this: That they're old
13 reactors. Pilgrim went online, for example, in '72.
14 And like old people, they're starting to fall apart.
15 They need replacements that Pilgrim and other old
16 reactors in deregulated markets are not spending the
17 money on, so things are breaking. And the NRC is not doing
18 its job of regulating nor putting in effect orders that
19 respond to the true challenges that we know from the
20 lessons learned at Fukushima.

21 So at Pilgrim they have had 17 event reports
22 this year. If you look at the 100 reactors across the
23 country, on average they have less than one shutdown per
24 reactor this year. Pilgrim has had nine times that. So
25 this goes --

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1 (Technical interruption.)

2 MS. LAMPERT: Hello?

3 MR. GUNTER: -- try and work it out.

4 MS. LAMPERT: Oh, okay. And so I agree
5 with much that has been said so far, and for efficiency
6 of time I'll just add pieces here and there.

7 In regard to electric power, the spent fuel
8 pools do not have a dedicated backup power system now.
9 To say that it's going to be dealt with down the line does
10 not provide reasonable assurance today. Furthermore, a
11 secondary emergency power capacity is not required in
12 decommissioned plants and licensees are allowed to
13 perform maintenance on emergency diesel generators when
14 reactors are undergoing refueling outages. Those two
15 points puts us at considerable danger for an accident
16 with containment failure.

17 As far as the assumption that mitigation is
18 adequate is also ridiculous. We can look at, for
19 example, the capability to add water to a spent fuel pool.
20 NRC's assumption that operators will be able to add water
21 to the pool mitigation during an accident is certainly
22 overly optimistic.

23 At Pilgrim they are supposedly going to
24 bring truck-mounted cranes or a ladder fire truck to the
25 site on short notice, however, this arrangement has never

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1 been realistically tested. An event that initiates or
2 co-initiates the accident; an earthquake, hurricane, ice
3 storm, blizzard or an attack would render a truck
4 unavailable. A radioactive release from a reactor
5 accident could produce radiation fields that render the
6 truck unavailable or preclude its use. And there is no
7 provision for a radiation-resistant TV camera to guide
8 nozzle positioning or for shielding of the truck or spray
9 operators, and there seems to be no recognition that
10 spraying water on exposed spent fuel could in certain
11 circumstances exacerbate the accident by feeding a zirc
12 steam fire.

13 And you go from one to the other and realize
14 that there is no waste confidence. And it additionally
15 seems counterproductive to make a final decision on this
16 petition before we've gone -- NRC has gone through the
17 process of the waste confidence ordered by the 5th
18 District Court.

19 Furthermore, we've called the game, and I
20 can send you the analyses of the earthquake study that
21 NRC is using to support the fact that relax, be happy,
22 there's no problem. That study is totally bogus. It
23 does not pass the sniff test of scientific integrity.
24 And I will send it to be added to this petition at the
25 end of this conference call.

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1 Further, I note that I had added to the
2 petition a supplement, 9/24/11, however, the Petition
3 Review Board's acceptance of this petition did not seem
4 to acknowledge that they had read it. And the two points
5 brought forward definitely have bearing on containment
6 integrity.

7 First of all, I brought forward the fact
8 that it appears that NRC is considering detonation,
9 explosions at Unit 3 as a result of a detonation. In your
10 analyses seems to assume a detonation and not consider
11 the possibility of a deflagration which was discussed in
12 reference to Unit 3 by Arnold Gundersen as mentioned in
13 my supplement. It's clear that containments cannot
14 withstand a shockwave that travels faster than the speed
15 of sound, which is the situation in a deflagration.

16 Furthermore, you see that the speed of sound
17 in a relatively warm, moist climate; in other words,
18 reactors near large bodies of water, is around 600 miles
19 per hour. Therefore, he contended that if this is what
20 we think it is, it would cause enormous damage to
21 containment because they certainly, these BWRs, are in
22 now way designed to handle it.

23 The second point which would be
24 consequences that I brought forward in that supplement
25 and I think deserves review by this Board is the fact of

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1 the control rods being inserted from the bottom in BWRs,
2 where in a PWR they enter from the top. What does this
3 mean? It means in a PWR at the bottom of the core is a
4 very thick 8 to 10-inch piece of metal that a nuclear
5 reactor core would have to melt through. But in BWRs
6 such as Pilgrim and at Fukushima the control rods come
7 up through the bottom. And when the nuclear core lies
8 on the bottom of a boiling water reactor like Fukushima,
9 like Pilgrim and the rest, it's easier for a core to melt
10 through because of those six-foot holes in the bottom of
11 the reactor. It doesn't have to melt through first eight
12 inches of steel.

13 NRC recognized this problem in that they
14 sent an email, which I attached -- by NRC right after
15 the Fukushima accident to Japan. And so I would join
16 with the others that we: (1) Have insufficient
17 mitigation. The amounts of relief are exceedingly and
18 unnecessarily high due to the lack of backbone in four
19 of the five Commissioners in not dealing with filters.
20 And this, however, is no excuse for the Commission to
21 continue to press for filters because we are down the
22 road. The option voted on by the Board was to kick the
23 filter can down the road, and we're there. And there can
24 be no excuse, particularly with a dry well event because
25 there is no way in hell that that is being scrubbed and

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1 no rational person will accept that all accidents will
2 be slow, well-behaved and the gases will slowly meander
3 and most of the radionuclides will get stuck on the sides.
4 That is ridiculous on its face.

5 And thank you for the opportunity.

6 MR. GUNTER: Thank you. Okay. Linda
7 Lewison --

8 MS. LEWISON: Yes?

9 MR. GUNTER: -- with NEIS?

10 MS. LEWISON: Can you hear me?

11 MR. GUNTER: Yes. Go ahead, Linda.

12 MS. LEWISON: Okay. This is Linda Lewison
13 in Chicago. I'm speaking on behalf of David Craft,
14 director of Nuclear Energy Information Service. I am a
15 board member.

16 Nuclear Energy Information Services is a
17 32-year-old safe energy anti-nuclear environmental
18 organization based in Chicago, Illinois. We submit the
19 following additional testimony in support of the 2.206
20 petition originally filed April 13th, 2011, calling for
21 the closure of GE boiling water reactors using Mark I and
22 Mark II containments.

23 NEIS has monitored the activities of
24 Illinois' nuclear reactors and federal and state
25 regulators since 1981. Illinois is the most

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1 nuclear-reliant state in the U.S. with 11 operating and
2 3 closed reactors. Within our borders sits 9,660 tons
3 of spent reactor fuel, the largest standing amount of
4 high-level radioactive waste of any state.

5 After observing the questionable,
6 inconsistent and at times lackadaisical historic
7 operation and regulation of these reactors, we are
8 extremely concerned about the protection, safety and
9 health of the people and environment in light of the
10 continuing development surrounding the Fukushima
11 nuclear disaster in Japan and NRC's sluggish, imprudent
12 and unwise decision making regarding implementing
13 prudent lessons learned, corrective actions at U.S.
14 reactors.

15 In light of the continuing and worsening
16 Fukushima disaster, NRC's inadequate treatment and
17 partial denial of issues in our previous conjoined 2.206
18 petition of April 2011, and NRC's recent decision to
19 overrule the advice of its own technical staff and
20 further delay prudent installation of filtered hardened
21 vents at Fukushima-type reactors in the U.S., we express
22 grave concerns about the safety of continued operation
23 of the four Mark I BWRs at Dresden and Quad Cities and
24 the two Mark II BWRs at LaSalle Station listed in this
25 petition and request acceptance of the contentions in

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1 this petition and closure of these reactors.

2 In addition to the contentions we raised in
3 the 2.2 petition of April 13th, 2011 and additional
4 comments of May 2nd, 2013, both of which we attach at the
5 end of this submittal for reference, we submit several
6 new contentions for consideration as the additional
7 basis for our request.

8 The high-level radioactive waste
9 inventory. A report prepared for the Department of
10 Energy in 2011 estimates that there exists 1,531 metric
11 tons of heavy metal, 9,029 assemblies of spent reactor
12 fuel at the Dresden Plant; 1,481 MTHM, that's 8,285
13 assemblies at Quad Cities; and 1,237 metric tons of heavy
14 metal, 6,885 assemblies, at the two LaSalle reactors.
15 This gives a total of 4,250 metric tons of heavy metal
16 and 24,199 assemblies stored five stories above ground
17 at the six Mark I and Mark II reactors in Illinois.

18 This accumulation of spent fuel at these
19 seven Illinois reactors is roughly nine times the total
20 accumulation of spent fuel at Fukushima Daiichi Units 1
21 to 4 reactors combined. Not only is this amount far
22 greater than that at Fukushima, but all of the Illinois
23 reactors continue to add new spent fuel pool to their
24 pools, increasing the heat load to each of the pools.
25 All the reactors at Fukushima add no new inventory, and

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1 therefore heat load to their pools. Thus the potential
2 risk grows at the Illinois reactors while we await NRC
3 directives to Exelon to implement all of the recommended
4 spent fuel pool improvements.

5 (2) Nuclear safety culture and, quote,
6 "the law." In our May 2nd, 2013 comments we pointed out
7 that NRC claims, quote, "a nuclear safety culture is the
8 core values and behaviors that emphasize safety over
9 competing goals to ensure protection of people and the
10 environment," unquote. We quote former Region III
11 director Charles Casto in stating it also, quote, "going
12 beyond what's required," unquote.

13 It was our conclusion at the time and
14 remains so today, and as long as General Design Criteria
15 16 for all Mark I and Ii reactors is ignored, that the
16 Nuclear Regulatory Commission lacks a safety culture as
17 it is self-defined.

18 During the Full Committee hearing of the
19 Senate's Energy and Natural Resources Committee to
20 consider the Nuclear Waste Administration Act of 2013
21 held on July 30th, 2013, an interesting set of remarks
22 came from two senators asking questions of Secretary of
23 Energy Moniz. Senator Jim Risch of Idaho commented on,
24 quote, "the state of the law." Quote, "We have a law that
25 clearly designates where the permanent storage is. I'm

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1 troubled by the fact that we're a nation of laws, and
2 whether we agree with the law or not, when a law is passed,
3 that's pretty much the way it is.

4 "The Executive Branch is commanded to
5 execute the laws backed by our Constitution, is commanded
6 to execute the laws the legislature passes. The
7 Executive Branch is indeed commanded to obey court orders
8 when a court orders something. What we have here is a
9 situation where we have a law which has identified Yucca
10 Mountain for what it is. And whether you agree or
11 disagree, it is the law. And yet for some reason nobody
12 seems to care."

13 Tim Scott, South Carolina, stated to
14 Secretary Moniz, "My concern is why Congress is allowing
15 DOE to break the law of the land as we know it today? The
16 law is very clear: Our nation's spent fuel pool and
17 defense waste should be disposed at Yucca.
18 Unfortunately, ignoring or failing to enforce laws that
19 happen to be politically inconvenient is becoming a
20 regular occurrence with the Obama administration, even
21 with laws they've passed. I understand that some may
22 found Yucca to be politically inconvenient, but that
23 doesn't matter. It's still the law of the land. The
24 nuclear industry, like any other industry has needs
25 certainly, and they need Yucca Mountain. What good are

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1 laws passed by Congress if for any reason we can decide
2 to enforce or not enforce them? What good are laws where
3 the mandate is pushed back causing consternation and lack
4 of certainty?

5 "The issue as we see it is simple: Mark I
6 and Mark II reactors are not in compliance with GDC 16.
7 The NRC intends to ignore GDC 16 and allow the reactors
8 to continue to operate. The law of the land says that
9 the reactors must be in regulatory compliance to operate.
10 And NRC's regulatory mandate and self-proclaimed nuclear
11 safety culture emphasize safety over competing goals to
12 ensure protection of people and the environment.

13 "The public, like industry, needs
14 certainty, certainty that the NRC will not cherry pick
15 the regulations it will enforce, that it will fully
16 enforce the regulations it has or lose all credibility
17 and public confidence."

18 We would submit to NRC if, quote, "the law
19 of the land is truly a legitimate and not merely
20 convenient and cherry-picked concern of the members of
21 Congress of NRC, it should be executed impartially on all
22 agencies of the Executive Branch." There is no
23 justification to single out DOE's lack of performance
24 according to the law on Yucca Mountain while continuously
25 allowing the NRC the power of enforcement discretion

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1 "finding a way out of the laws of the land as opposed to
2 enforcement of the laws of the land," unquote.

3 The NRC is bound by the law of the land to
4 enforce General Design Criteria 16 for all Mark I and II
5 reactors. NRC is not following the law as Congress
6 intended if it does not enforce GDC 16 for all Mark I and
7 II reactors. You do not have a nuclear safety culture
8 at NRC if you merely follow the letter of the regulations,
9 do check box exercises and cherry pick the regulations
10 you enforce.

11 The people of Illinois tell you point blank
12 we have, quote, "no confidence in this style and pattern
13 of regulation and lack of a nuclear safety culture." We
14 feel threatened by your inaction and we do not and will
15 not accept its continuation as valid regulatory
16 practice. If we do not see progress in NRC enforcing its
17 regulations for Illinois reactors, we may have to seek
18 intervention at a higher level.

19 Response to additional contentions of May
20 2013. To date NEIS has received no response to rebuttal
21 from NRC to the contentions introduced on May 2nd, 2013.
22 We request written rebuttal to the contentions raised.
23 Thank you for this opportunity to speak.

24 MR. GUNTER: Thank you. Wally Taylor?

25 (No audible response.)

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1 MR. GUNTER: Are you there, Wally?

2 (No audible response.)

3 MR. GUNTER: Gretel Johnston?

4 MS. JOHNSTON: Yes, thank you. Hello, my
5 name is Gretel Johnston.

6 MR. GUNTER: Go ahead, Gretel, introduce
7 yourself.

8 MS. JOHNSTON: Hello.

9 MR. TAYLOR: -- Wally. Can you hear me?

10 MR. GUNTER: Okay. Let's do Wally and then
11 Gretel.

12 MS. JOHNSTON: Okay.

13 MR. TAYLOR: I apologize. I was on mute
14 and I --

15 MR. GUNTER: Yes, I just want to remind the
16 speakers we have a little less than 20 minutes. So
17 please be concise. Thanks.

18 MR. TAYLOR: Thank you. This is Wally
19 Taylor. I'm with the Iowa Chapter of the Sierra Club and
20 also the National Sierra Club's Nuclear Free Campaign.
21 I'm speaking specifically about the Cooper Nuclear
22 Station along the Missouri River, the Duane Arnold Energy
23 Center in Iowa along the Cedar River, and the Quad Cities
24 Generating Station along the Mississippi River.

25 The first point I want to make is that these

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1 reactors, like many or most of the Mark Is and Mark IIs,
2 were put on line in the early '70s. So certainly
3 technology changes in the past almost 40 years and
4 certainly the lessons learned hopefully are added to what
5 we know in the past 30 or 40 years.

6 So the filtered vents that we're talking
7 about here are something that we know will work and must
8 be added to the plants, and that this the kind knowledge
9 that we need to keep adding to our nuclear fleet to keep
10 them safe. Other folks have talked about the flooding
11 issues. I want to just add a couple of points.

12 With respect to the Missouri River there
13 have been several studies. One was mentioned already,
14 the Perkins et al study. There was another one done by
15 David -- whose name escapes me. And I've tried to get
16 a copy of that, but the NRC refuses to release that
17 document. And it just seems to me that the public needs
18 to know that information.

19 And the flooding incidents are what will
20 make the filtered vents necessary. On the Missouri
21 River, for example, there are six upstream dams from
22 Montana down to South Dakota. The Fort Peck Dam in
23 Montana has behind it 18.6 million acre feet of water.
24 The Garrison Dam has 23.8 million acre feet of water
25 behind it. And the Oahe Dam has 23.5 million acre feet.

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1 The other three dams are smaller, but you can see that's
2 a lot of water. And what experts have told me is that
3 if any one or more of those dams breaks, it'll be worse
4 than tsunami and it will impact these nuclear plants and
5 will have the same kind of hazard that we had at
6 Fukushima.

7 The Mississippi River also floods and can
8 cause damage to nuclear plants that we need these
9 filtered vents for. The Cedar River next to the Duane
10 Arnold Plant flooded five years ago with an unprecedented
11 flood. Fortunately the Duane Arnold facility was not
12 impacted, but it came extremely and perilously close.
13 So these and other plants are subject to flooding hazards
14 that need to be addressed. And what really
15 distresses me about the Commission's initial response to
16 this petition is like I've seen in other 2.206 petitions.
17 The response is basically, well, we're working on it and
18 sometime somehow we will get it figured out, so we don't
19 need to do anything now. Well the purpose of a 2.206
20 petition is to ask the Commission to take action that
21 needs to be taken and to just say that somehow some way
22 in the future we'll get it figured out because we're
23 working on it really doesn't answer the question and
24 really doesn't respond to what a 2.206 petition is
25 designed to do. This is the public's only way, absent

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1 some sort of proceeding where intervention is allowed,
2 to seek action from the Commission that needs to be taken.
3 And the Commission needs to address this problem and
4 needs to take this petition for review and to grant the
5 relief requested. Thank you.

6 MR. GUNTER: Thank you, Wally. Gretel
7 Johnston?

8 MS. JOHNSTON: Yes, hello. Can you hear me
9 all right?

10 MR. GUNTER: Yes, Gretel. Go ahead.
11 Proceed.

12 MS. JOHNSTON: Okay. Yes, my name is
13 Gretel Johnston and I'm representing BEST/MATRR, the
14 Bellefonte Efficiency & Sustainability Team and Mothers
15 Against Tennessee River Radiation in the Tennessee
16 Valley. We will be specifically addressing issues with
17 the three GE Mark I reactors at Browns Ferry Nuclear Power
18 Plant in North Alabama.

19 Given the recent resignation -- kind of as
20 a prologue, I would like to say the recent resignation
21 of the 26-year veteran engineer at Browns Ferry, we would
22 like to just take a stand in support of her whistle blower
23 protest. The discovery of tampering with root cause
24 safety reports is extremely strong grounds for
25 withdrawal of the Browns Ferry operating license. To

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1 doctor safety reports against the will of the trained
2 specialists who write them is a serious violation of the
3 very foundation of nuclear safety, and we'd call on the
4 NRC to act with definitive strength on this issue.

5 Browns Ferry Unit 1 has earned NRC's worst
6 rating. And according to NRC records, the BFN reactor
7 Units 1, 2 and 3 have the longest shutdown records of any
8 reactors in the United States and have suffered over 270
9 emergency scrams which undoubtedly add to the type 304
10 stainless steel vessel degradation, and the control rods
11 cracking further weakening the integrity of the poorly
12 designed Mark I reactor containment and safety.

13 We agree with Beyond Nuclear's petition
14 that not putting filters on these unfiltered vent
15 modifications voids the original licensing agreement
16 which requires an essentially leak-tight containment
17 structure against the uncontrolled release of
18 radioactivity. Without filters to remove a large
19 percentage of radioactive emissions, any release,
20 whether intentional or inadvertent, violates the
21 licensing agreement for these GE reactors. While the
22 NRC is further extending safety retrofit deadlines, our
23 community has three aged Browns Ferry reactors that
24 appear to be leaking radiation into our air and young
25 people and babies who live here are dying at a rate of

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1 21 to 27 percent higher than average U.S. communities.

2 Infant mortality rates in the areas
3 surrounding Browns Ferry seem to be illustrating a
4 bathtub curve effect. The numbers of babies who died in
5 their first year of life jumped when the Mark I reactors
6 first came online here in the mid-1970s. Then the rate
7 declined until the late 1990s. Since then there has been
8 a steady increase in infant mortality to 21.6 percent
9 above the U.S. rate in 2010. The figures are even worse
10 for Hispanics at 40 percent. And white babies are dying
11 at a 32.6 percent higher rate near and downwind of Browns
12 Ferry than in average U.S. communities.

13 Our group of concerned citizens took
14 radiation readings with a quality calibrated Geiger
15 counter from 50 sites surrounding Browns Ferry in varying
16 weather conditions and found readings from 36 to 600
17 counts per minute for 40 times background radiation
18 levels. The lowest, 1,600 counts per minute at 40 times
19 background radiation levels. The lowest readings were
20 recorded upwind of Browns Ferry and the highest readings
21 were recorded downwind during rain events as far as 70
22 miles from Browns Ferry.

23 This indicates the possibility that the
24 aging Browns Ferry reactors may be leaking radioactivity
25 in our valley and we call on the NRC to require more

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1 thorough, frequent and transparent monitoring from
2 reactor operators, if not from the NRC or an independent
3 scientific group up to 100 miles from the plant in
4 seasonal prevailing downwind directions.

5 Our official records show that tritium
6 levels in drinking water measured in Muscle Shoals, some
7 40 miles west of Browns Ferry, and in Scottsboro, some
8 70 miles southeast of Browns Ferry -- those readings are
9 three to four times higher than tritium levels in
10 drinking water in Montgomery, Alabama, which is over 100
11 miles from any nuclear facility. We think there is a
12 very real possibility that large populations in North
13 Alabama are being contaminated with Browns Ferry
14 emissions either from corroded torus wells, leaking
15 valves and/or inadequate filtering and we call on the NRC
16 to investigate.

17 We also want to bring attention to threats
18 to the raised cooling pool for these reactors. We agree
19 with the Petitioners that these cooling pools holding far
20 more radioactivity than the reactor cores should be
21 required to have dedicated backup power. In the
22 southeast and increasingly in other parts of the country
23 tornados are a severe and repeated threat to these
24 cooling pools and we think that new regulations need to
25 be implemented to categorize tornado safety standards in

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1 a way similar to seismic threat categories.

2 At Browns Ferry alone well over 250 million
3 curies of radiation is stored in these pools with only
4 sheet metal roofs overhead. The initial studies by GE
5 for tornado safety were conducted in 1968 when it was
6 still thought that opening windows helped reduced
7 tornado damage, thus blowout panels were designed into
8 the metal roofs. In April of 2011 the strongest tornado
9 known to man, a category EF5, wreaked havoc about 500
10 meters from the pools twisting a row of power towers into
11 pretzels and cutting power to all of North Alabama and
12 much of Tennessee. Browns Ferry Nuclear Plant was
13 forced to use diesel generators for seven days to keep
14 the three reactors and cooling pools from meltdown.

15 We think another threat is the possibility
16 of a tornado sucking contaminated water from the pools
17 and spewing it across our valley. We consider these
18 open-topped cooling pools to be a general design criteria
19 fault along with the lack of dedicated cooling pool
20 backup power and the licensing of these designs to be an
21 error.

22 As long as the faulty design is still
23 allowed to operate, we call on the NRC to: (1) Require
24 a defined and hopefully accelerated schedule for
25 removing fuel from these cooling pools to be stored in

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1 onsite hardened dry cask storage bunkers so that only the
2 fuel stored for the necessary five-year period as
3 determined by NRC and the Academy of Sciences in 2005 are
4 retained in the pools rather than the far safer hardened
5 onsite dry cask storage containers; (2) we call on you
6 to require reinforced overhead containment of these
7 cooling pools; and (3) to establish regulations similar
8 to current seismic categories and enforce substantial
9 strengthening of overhead cooling pool containment.

10 At this point I would like to submit for the
11 record our recent report, "Radioactive Emissions and
12 Health Hazards Surrounding Browns Ferry Nuclear Power
13 Plant in Alabama," which will be both emailed and snail
14 mailed with our comments. The report can be downloaded
15 from our Web site at MATTR.org, M-A-T-T-R dot org.
16 Thank you for your attention to these issues and for your
17 service to our country and its people living near nuclear
18 facilities.

19 MR. GUNTER: Thank you, Gretel.

20 We'll now hear from Leslie Sullivan Sachs.

21 MS. SACHS: Thank you. I am with the Safe
22 and Green Campaign and the SAGE Alliance, citizens groups
23 from the tri-state area around Vermont Yankee Nuclear
24 Power Plant.

25 A month ago Entergy announced that they

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1 would close Vermont Yankee when it ran out of fuel. We
2 are pleased that Yankee is the fifth reactor closure
3 announced in 2013, but we are very worried that Entergy
4 will not spend what it takes to do the maintenance nor
5 necessary upgrades to keep this reactor running safely
6 until they pull the plug and move the spent fuel out of
7 the fuel pool.

8 Entergy said that it will close Vermont
9 Yankee because of finances. They said it had nothing to
10 do with politics or their legal battles, but their choice
11 to engage in legal battles has everything to do with
12 finances. In addition to the federal preemption
13 lawsuits against the State of Vermont they initiated,
14 Entergy initiated a suit at the Vermont Supreme Court.
15 They are continuing that suit even though the state has
16 said that since Yankee is closing the case is moot.
17 Entergy sued and they're appealing a tax case.

18 They're still in the relicensing permit process
19 before the Public Service Board. And just to show you
20 the kind of harassment types of suits they're doing, last
21 April they even sued the state and federal court because
22 they said the state wasn't moving fast enough on approval
23 of a new backup diesel generator for the waste pool even
24 though the state publicly stated that it did not oppose
25 the approval.

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1 The typical legal costs of a license
2 extension is \$2 million. According to a source in
3 Yankee's administrative office, Entergy has spent \$80
4 million on legal fee since initiation of license
5 extension practice. By comparison the post-Fukushima
6 costs at Vermont Yankee were estimated in the \$40
7 million-plus range. So Entergy is more interested in
8 setting legal precedents and harassing the state than
9 they are investing in post-Fukushima upgrades or on
10 maintenance. We wonder if this litigious pattern will
11 follow them to Pilgrim and FitzPatrick, other
12 Entergy-owned Fukushima-style reactors.

13 In addition, six weeks before the closure
14 announcement Entergy announced company-wide layoffs
15 including 30 workers at Vermont Yankee, 75 at Indian
16 Point, 30 at FitzPatrick and 30 at Pilgrim. For even
17 though we're happy about closure, we are worried more
18 than ever about public safety. The next 14 months will
19 be a dangerous time for those of us in the evacuation
20 zone, especially for those children in the school across
21 the street from the reactor.

22 Radiation leaks are now being reported
23 regularly. Four times in June and July monitors
24 registered false positive for high radiation. The day
25 before the closure announcement there was another

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1 spurious spike of supposedly false radiation readings in
2 a radiation detector that had been replaced within the
3 last month according to a letter from the NRC to the
4 state.

5 On September 19th, a leak occurred in a key
6 safety system, the high-pressure coolant injection
7 system, which released a small amount of radioactivity
8 within the reactor building.

9 On September 24th through the 25th, low oil
10 levels were discovered due to a loose compression fitting
11 on a recirculation pump motor oil reservoir. The
12 reactor was brought down to 14 percent.

13 So we worry. Will the workers depart a
14 sinking ship that is sporadically leaking radiation into
15 their workplace? Will they leave to find permanent work
16 elsewhere? Will new workers come in who do not know the
17 reactor well enough to stay on top of these constant
18 problems? Will Entergy spend the money necessary to
19 maintain the plant, or will they use reconditioned parts
20 and the equivalent of chewing gum and duct tape to mask
21 the problems?

22 And we will continue to worry after shutdown
23 about the most dangerous part of the plant, all that spent
24 fuel in the fuel pool, more than four times what are in
25 the Fukushima pools. It will be left to cool down for

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1 years, perhaps decades, until it can be moved into dry
2 casks and abandoned on the banks of our Connecticut
3 River. As you know, the BWR Mark I has no protection for
4 the fuel pool. None. A breakaway roof and blowout
5 panels do not protection make.

6 This is why all 23 reactors must be shut down
7 today. The nuclear industry is in a perilous position.
8 I strongly recommend you read Mark Cooper's two reports:
9 "Nuclear Safety and Nuclear Economics" and "The Impacts
10 of Fukushima on Nuclear Economics," and his most recent
11 report, "Renaissance in Reverse: Competition Pushes
12 Aging U.S. Nuke Reactors to the Brink of Economic
13 Abandonment." He lists the reactors most at risk to
14 close because of particularly intense challenges, five
15 of which are Mark I and Mark II reactors: Nine Mile Point
16 No. 2, FitzPatrick, Clinton, Pilgrim, VY and Oyster
17 Creek.

18 Economic pressures and necessary
19 post-Fukushima safety regulations are too much for this
20 industry to bear. They cannot perform safely. Have
21 mercy on this industry. Shut down all the
22 Fukushima-style reactors now. In Vermont we call it
23 death with dignity.

24 MR. GUNTER: Thank you, Leslie.

25 and our final speaker is Jeff Brown. And

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1 if we could indulge him to finish his statement. Thank
2 you.

3 Jeff?

4 MR. BROWN: Yes, my name is Jeff Brown.
5 I'm a member of GRAMMES, Grandmothers, Mothers and More
6 for Energy Safety. We're focused on the Oyster Creek
7 Nuclear Generating Station in Lacey Township at the
8 Jersey Shore.

9 Those of us who live within the potential
10 fallout zone of Oyster Creek do not currently have
11 defense-in-depth against radiation releases from a
12 possible core damage accident or a terrorist attack. As
13 a former Northern New Jersey resident, I remember well
14 the nauseous smell from a smoldering World Trade Center
15 days after 9/11 when the wind shifted in our direction.
16 Whenever we've dealt with NRC, the possibility that a
17 terrorist attack could actually cause a problem is always
18 swept under the rug.

19 I had the opportunity along with several of
20 my colleagues at GRAMMES to meet with Commissioner
21 Apostolakis at the end of August and one of the questions
22 we asked him is how could it possibly be that the NRC would
23 give industry two refueling outages to even begin to deal
24 with these issues? And he said it was just we've always
25 done this way. He would look into it. I don't think

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1 we've heard from him since. But to me it's
2 clear that the way that the NRC is currently operating
3 is with crossed fingers. It's not going to be a problem
4 because we don't think it will be a problem, therefore
5 we don't really have to treat it seriously. This wishful
6 thinking approach does not give primary commitment to
7 health and safety for those of us in reactor communities.

8 It seems to me that the illustration of the
9 Japanese response to requiring these hardened and
10 filtered vents gives us a clue of how do we get the
11 industry to want to do it? Where is the pressure coming
12 in Japan for putting on these vents and putting on these
13 filters? It's because they are shut down and in order
14 to operate they've got to get it up and running to do this
15 with the filters, with protection.

16 If you would accept our petition and shut
17 down all these reactors, those that can't meet the grade
18 will not reopen. Those that possibly can meet the grade
19 for public health and safety would get an opportunity to
20 reopen and we'd have everybody pulling oars in the same
21 direction for a change.

22 Finally in terms of even a kind of a
23 thumbnail cost benefit analysis approach, we were
24 affected by Superstorm Sandy and thus we know that \$62
25 billion worth of damage was done to New Jersey and the

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1 New York area. New Jersey alone sought \$37 billion from
2 the Federal Government for assistance. The Jersey Shore
3 economy, our Ocean and Monmouth Counties alone in 2012
4 accounted for \$6 billion.

5 Exelon bought Oyster Creek at a bargain
6 basement price of only \$10 million. It seems quite
7 self-apparent that even the cost benefit analysis would
8 say close them down. Thank you.

9 MR. GUNTER: Thank you, Jeff. And that
10 concludes our presentation.

11 CHAIRMAN DAVIS: Okay. Are we going to go
12 to questions?

13 MR. GUNTER: Yes, right.

14 CHAIRMAN DAVIS: Okay.

15 MR. GUNTER: Yes, thanks.

16 MR. SMITH: So does any of the Board Members
17 or the staff supporting the Board have any questions for
18 the Petitioners today?

19 MEMBER DENNIG: I don't have a question. I
20 just have a comment. As far as public participation is
21 concerned in this particular subject, I assume you're
22 following and are aware of the public meetings on the
23 Interim Staff Guidance and the rulemaking that's in
24 process and that you're able to participate in that.

25 CHAIRMAN DAVIS: I do want to make a

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1 statement, perhaps highly unusual in these kinds of
2 proceedings, but I think it's important to note, you
3 know, my mother and most of my family live within about
4 40 miles of one of these reactors. So if you don't think
5 I take nuclear safety seriously, you're kidding
6 yourself. But I got to tell you that, you know, I take
7 exception to numerous presenters that say that the Agency
8 is doing absolutely nothing or the things that we have
9 done are worthless or laughable. The Agency is
10 working through a lot of these issues, many of the issues
11 that you mentioned. The seismic walk-downs, the
12 flooding walk-downs, the beyond design basis mitigating
13 strategies activities. They are taking actions on a lot
14 of these things. And so I think it's important for the
15 record that I state that and say that, you know, sometimes
16 if you move too quickly, you get unintended consequences.
17 So I think the Agency has an obligation to move in a very
18 judicious manner to make sure they're making the right
19 changes that are necessary to ensure public health and
20 safety.

21 So I know that's unusual. I wanted to make
22 that statement.

23 Okay. Should we go to the phones then?

24 MS. LAMPERT: Yes, I have a comment, Mary
25 Lampert, that the NRC has effectively shut the doors to

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1 substantive public involvement. If you take the 2.206
2 petition process, Judge Rosenthal of the Atomic Safety
3 Licensing Board reported that with one possible
4 exception the NRC had not granted a 2.206 petitioner the
5 substantive relief it sought for at least 37 years.
6 Judge Rosenthal concluded that where truly substantive
7 relief is being sought there should be no room for a
8 belief on the requester's part that the pursuit of such
9 a course is either being encouraged by the Commission or
10 has a fair chance of success.

11 As far as orders go, in reality they are not
12 open to public challenge. The Bilotti decision
13 established that petitioners must show the order in and
14 of itself is harmful. I've said the order is
15 insufficient and does not respond to lessons learned from
16 Fukushima as has been the case in orders --

17 (Telephone interference.)

18 As of rule change petitions, frankly none
19 of us will live long enough. We need an analysis of
20 substantive relief to public filings of rule change
21 petitions. How many have been accepted in a substantive
22 way in 37 years. The public's perception is zero to
23 none. Participation in open public meetings, there is
24 a distinct difference between being heard and action.
25 Being heard does not provide reasonable assurance of

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1 public health and safety.

2 Also I would like to know how many public
3 meetings in addition to those announced has industry had
4 the opportunity for a one-on-one extra meetings with NRC
5 versus how many one-on-one extra meetings the public has
6 had.

7 Last, the specific danger is of NRC not
8 enforcing regulation. GDC 16 as discussed today is an
9 example. And instead of making regulations, there has
10 been a continual habit of late of not making regulations,
11 but instead suggestions. Voluntary compliance.
12 Information notices that do not require any action.

13 So that's why we are most disturbed and
14 particularly when these BWRs in deregulated markets are
15 on thin ice, they do not have the money to initiate the
16 fixes that are required, and NRC has not had the staffing
17 or will; I'm not saying which, to be Johnny-on-the-spot
18 and assure that they do. So we are in a very, very
19 dangerous position. And I hope to God it's not my
20 reactor, but it will be one. Thank you for the
21 opportunity.

22 MR. SMITH: Okay. Before we get too far
23 into questions, I just want to remind everyone that only
24 2.206 process-specific questions will be addressed.
25 And also we only have like a limited amount of time that's

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1 left, so we may not be able to get to all of the questions
2 that we may have from the public. But we ask that if you
3 ask the questions, introduce yourself and which
4 organization you represent if you are representing the
5 organizations.

6 You guys have any feedback for the last
7 questions that was asked?

8 CHAIRMAN DAVIS: I don't have anything
9 specific to say, no.

10 MR. SMITH: All right. Great. Thanks.
11 Operator, if you can cue the next question that's there
12 then.

13 (No audible response.)

14 MR. SMITH: Okay. So there's no questions
15 from the operator. Are there any other questions 2.206
16 process-specific-type questions that would like to
17 address at this time?

18 MR. GUNTER: Yes, Paul Gunter, Beyond
19 Nuclear. Are we going to get a director's decision out
20 of this? If you proceed to dismiss this petition preview
21 process, does it currently elevate to the level of
22 getting a director's decision where a lot of our
23 questions and concerns will be addressed?

24 MEMBER LAMB: This is John Lamb. Once the
25 Board makes a decision, if it's accepted, then you get

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1 a director's decision. If it's rejected, you just get
2 a letter saying here's why it was rejected. So it's only
3 the acceptance part that you'll get a draft director's
4 decision and then a final director's decision. That's
5 the difference.

6 MR. GUNTER: This is Paul Gunter again.
7 Does the letter that you will send us with your final
8 determination -- what detail does it address some of the
9 concerns and issues and questions that have been raised
10 in this process today?

11 MEMBER LAMB: It will address your petition
12 that you came in with, you know, revoking all BWRs.
13 Basically that you disagree with the Commission SRM about
14 the vent. You want the radiation hardened vent. That's
15 what it will address.

16 CHAIRMAN DAVIS: This is Jack Davis from
17 the Board. I think your question goes though -- you're
18 asking how much detail, right, would go to -- correct?
19 You have a comment to that, John?

20 MEMBER LAMB: It provides, you know, a
21 level of detail that will answer the question as much as
22 possible.

23 MR. SMITH: Are there any other questions?

24 MR. JOHNSON: Can we make a statement?

25 MR. SMITH: One moment, please.

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1 MR. KAMPS: Hello. Can I go ahead?

2 MR. SMITH: Go ahead.

3 MR. KAMPS: Yes, my name is Kevin Kamps,
4 also with Beyond Nuclear, and I have a question about the
5 2.206 process. This came up at a meeting with
6 Commissioners Magwood and Ostendorff several months ago
7 held at NRDC's office in Washington, D.C. And Tom
8 Cochran from the Nuclear Division at NRDC made a comment
9 that he once had a conversation with the original NRC
10 staff or Office of General Counsel author of the 2.206
11 regulations in the first place, and that person described
12 to him, admitted to him that the entire process was
13 designed as a black hole into which the public would enter
14 and never come out, at least victorious, with substantive
15 relief, as Mary Lampert put it.

16 So I'm just curious if this Petition Review
17 Board would agree with that characterization that Tom
18 Cochran described with the original author of this
19 regulation.

20 CHAIRMAN DAVIS: I mean I'm not familiar
21 with what you're talking about and the background. I can
22 tell you, as I said before, I will give due diligence to
23 the petition that's before us and to ensure that we arrive
24 at the right decision based upon all the information that
25 we have available to us.

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1 MR. KAMPS: I guess my follow-up question
2 is what would explain what Mary Lampert gave as the record
3 of the 2.206 process, perhaps one possible exception, no
4 substantive relief granted the public in nearly four
5 decades.

6 CHAIRMAN DAVIS: Yes, I mean certainly I
7 can't comment on that. I don't know all of the cases that
8 she was referring to. Again I can tell you, as I've told
9 John repeatedly during this process, that I want all of
10 the concerns that are laid out in the petition to be
11 adequately addressed. And I think that's why Paul is
12 getting to how much detail are we getting when we say no
13 immediate concern and then there's nothing further
14 beyond that. We should be able to give you further
15 information or reference the documents that we're
16 referring to to explain, if that were where we come out.

17 MR. KAMPS: Thank you.

18 MR. SMITH: Someone on the line had a
19 comment. As a reminder, the comment period is over.
20 We're looking for the 2.206 process-specific questions.
21 If you have any questions related to the 2.206 process,
22 you can ask those questions at this time.

23 MS. LAMPERT: Mary Lampert again, Pilgrim
24 Watch. I would add also to 2.206, it is correct that you
25 cannot appeal a decision within the NRC, is that correct?

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1 One PRB at the end of August.

2 MEMBER LAMB: This is John Lamb from NRC.
3 Yes, if the petition is rejected, there is no recourse.

4 MS. LAMPERT: That's another problem when
5 you think about it. Now would you like me to send the
6 link to Judge Rosenthal's decision?

7 CHAIRMAN DAVIS: Sure, Mary. That's fine.
8 Absolutely. Any additional information like that would
9 be helpful.

10 MS. LAMPERT: And who should I send it to?

11 MEMBER LAMB: Send it to
12 john.lamb@nrc.gov.

13 MS. LAMPERT: Okay. Thank you very much.

14 MR. SMITH: Okay. I'd like to thank
15 everyone for their time and attention. And this is the
16 end of the meeting. We'd like to reintroduce Mr. Jack
17 Davis at this time to end the meeting.

18 CHAIRMAN DAVIS: I think what I was saying
19 before was actually my closing statement where I am
20 taking this serious as the Chairman of this Board. I am
21 listening to what you're saying and I am trying to balance
22 what the Agency's doing and what you're asking for.

23 And as you know from the May meeting, I asked
24 the question of whether you felt that it was inadequate
25 what the Agency was doing or whether the Agency was on

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1 a time scale that you felt was not appropriate. Because
2 I've heard many of your discussions today talking about
3 how long it's taking the Agency to get to that location
4 with EA 109, with the other beyond design basis
5 mitigating measures that I'm currently heading up. We
6 are on a path to making significant amounts of
7 improvements to beyond design basis measures for very
8 extreme natural phenomena. That's an important point to
9 keep in mind. And so we are on a path.

10 You know, whether you believe that path is
11 not past enough, I hear different things from different
12 folks as they were presenting. Some were saying, well,
13 I don't think it's happening fast enough and others are
14 saying it's not good enough. So that's what I need to
15 kind of sift through and understand, you know, where the
16 real issue lies with the petition.

17 MS. LAMPERT: I think what we're saying -- I
18 know Pilgrim Watch is saying, because I have multiple
19 2.206s before you, it's not either or, it's both, that
20 2016 -- giving all that time to licensees is not
21 acceptable because then we have no reasonable assurance
22 today or for the next four or five years, number one. And
23 what is being done is insufficient.

24 CHAIRMAN DAVIS: Appreciate that
25 clarification. Thank you.

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1 MR. JOHNSON: Another thing I would note is
2 that the Japanese authorities obviously have been shown
3 to be inadequate in enforcing the pre-Fukushima
4 requirements of the plant there, but post-Fukushima I
5 think they've shown a better understanding of the
6 seriousness of that accident in deciding that rather than
7 have plants continue to operate while they figure out
8 what is a safe operating standard that they would close
9 plants and then determine when it would be safe to reopen
10 them. And I think that perhaps the NRC and what saying
11 with this petition is that these particular plants which
12 have proven to be insufficiently safe should be shut
13 until they can be shown to be safe.

14 CHAIRMAN DAVIS: Thank you for the
15 additional comment. Appreciate it.

16 Are there any others? If someone wants to
17 say something, I'm fine with continuing.

18 (No audible response.)

19 CHAIRMAN DAVIS: Okay. With that then, do
20 we have the court reporter? Yes. And do we need any
21 additional information from anyone?

22 (No audible response.)

23 CHAIRMAN DAVIS: To the court reporter, do
24 we need anything else?

25 COURT REPORTER: Who was the last

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1 commenter?

2 MR. JOHNSON: It was Chuck Johnson from
3 Oregon and Washington PRS in Portland, Oregon.

4 COURT REPORTER: Thank you. That's it.

5 MR. JOHNSON: Thank you.

6 CHAIRMAN DAVIS: Okay. Thanks. And then
7 I guess with that we will adjourn the meeting.

8 (Whereupon, the hearing in the
9 above-entitled matter was concluded at 3:15 p.m.)

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