



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 26, 2011

LICENSEE: NextEra Energy Seabrook, LLC

FACILITY: Seabrook Station

SUBJECT: SUMMARY OF PUBLIC MEETINGS CONDUCTED TO DISCUSS THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT RELATED TO THE REVIEW OF THE SEABROOK STATION LICENSE RENEWAL APPLICATION (TAC NO. ME3959)

On Thursday, September 15, 2011, members of the U.S. Nuclear Regulatory Commission (NRC) staff held public meetings in Hampton, New Hampshire, concerning the staff's environmental review of the application submitted by NextEra Energy Seabrook, LLC (NextEra) for renewal of the Seabrook Station (Seabrook) operating license. The purpose of the meetings was to provide the public with an opportunity to comment on the draft supplemental environmental impact statement (SEIS) which was issued on August 1, 2011. The public meetings were held at One Liberty Lane Conference Center in Hampton, New Hampshire.

The draft SEIS is a plant-specific supplement for Seabrook to the "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (NUREG-1437). The NRC staff described the overall license renewal process, provided a description of the National Environmental Policy Act review process, and discussed the environmental requirements outlined in Title 10 of the *Code of Federal Regulations* Part 51 (10 CFR Part 51). The NRC staff also described the preliminary results of their analyses. The environmental impacts of continued operation were predicted to be small in all areas with the exception of aquatic resources which has small to large impacts. The impacts of alternatives (including the no-action alternative) were predicted to have impacts in at least some environmental aspects that could reach moderate or large significance.

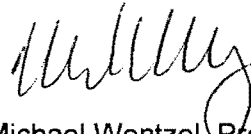
After the formal presentations were given by the NRC staff, members of the public were invited to provide comments. Approximately 81 people attended the two sessions. Attendees included members of the public, representatives of the NRC and NextEra, and members of Congressional staff.

In an effort to improve communication and increase interaction with members of the public, the NRC staff conducted open houses for one hour before each meeting and encouraged the public to submit meeting feedback forms. The staff provided brochures and met with members of the public to answer questions about the proposed renewal of Seabrook.

A combined listing of attendees for both sessions is provided in Enclosure 1. Enclosure 2 is a copy of the handout provided during the public meeting open house, including the agenda. The official transcripts for both meetings and any written comments submitted during the meetings are publicly available at the NRC Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike, Rockville, MD 20852, or from the NRC's Agencywide Documents Access and Management System (ADAMS). The ADAMS Public Electronic Reading Room is

accessible at <http://www.nrc.gov/reading-rm/adams.html>. The transcripts for the afternoon and evening meetings are listed under Accession Nos. ML11273A139, and ML11273A140, respectively. A copy of the slides used during the NRC's presentation is also available in ADAMS under Accession No. ML11259A002. Persons who do not have access to ADAMS, or who encounter problems in accessing the documents located in ADAMS, should contact the NRC's PDR reference staff by telephone at 1-800-397-4209, or 301-415-4737, or by e-mail at pdr.resource@nrc.gov.

The comment period for the Seabrook draft SEIS ends on October 26, 2011. The NRC staff will consider all comments on the Seabrook draft SEIS and make any necessary revisions to the document prior to issuing its final SEIS.



Michael Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-443

Enclosures:
As stated

cc w/encls: Listserv

**LIST OF ATTENDEES
SEABROOK STATION
DRAFT SUPPLEMENTAL ENVIRONMENTAL
IMPACT STATEMENT PUBLIC MEETINGS**

SEPTEMBER 15, 2011

<u>PARTICIPANTS</u>	<u>AFFILIATION</u>
Brian Anderson	U.S. Nuclear Regulatory Commission (NRC)
Richard Conte	NRC
Eugene Dacus	NRC
Dennis Morey	NRC
Leslie Perkins	NRC
Richard Plasse	NRC
William Raymond	NRC
Diane Screnci	NRC
Michael Wentzel	NRC
David Wrona	NRC

The sign-in sheets from both meetings are shown on the following pages.



**U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of License Renewal**

**SEABROOK STATION
LICENSE RENEWAL APPLICATION**

**Attendance List
September 15, 2011, 1:30 p.m. -- 4:30 p.m.**

Name.	Affiliation
Mary Graw	Citizen
Janette	Consultant Fuel Energy
Capital & Tilley	LOCAL RESIDENT ST
BRIAN STERN	NONE
Cynthia M. Williams	none
Anthony W. Drew	NH Dept Env in Sp
Ron Sher	Next Era Energy Seabrook.
Raymond Shadis	FRIENDS of the COAST NEW ENGLAND coalition
Max Abramson	self
Hendrik Sweener	self?
Richard Locke	state of NH, DPAS, BFRP
RICHARD CLICHE	NEXTERA ENERGY
Ali S. Kadal	NEXTERA ENERGY
Edward Carney	"
Isaac Snyder	XXXXXXXXXX
Steven Athearn	Walk for Fukushima
Mie Athearn	Walk for Fukushima.

Name	Affiliation
Eric Chusiel	walk for Fukushima
William R Higgins	Individual & Foundation for Resilient Societies
Alan Griffiths	Next Era Seabrook
Peter Tutinas	Next Era Seabrook
Michael Sork	Sen. Ayotte
Jim Letro	FPL
Doug Bogen	SAPL
J R Tucker	NextEra Energy
THOMAS POPIK	FOUNDATION FOR RESILIENT SOCIETIES
Eyle Stecker	Patch.com
BRUCE SKUD	
Neil Pietrafenico	NextEra Seabrook
Eric Johnson	"
Ed Antosz	"
Josephine Donovan	Portsmouth
Barbara White	Lee, NH
Natalie Grinnell	C-10 FOUNDATION
Kelsey Ward	NextEra Energy Seabrook
Gregory Tattton	myself
Al Legendre	NextEra Seabrook
Marcia Bowen	Normandeau
Liz Ann White	NH Gas 115 LLC
Mara Bradwick	Hampton president
Saraha Cavatita	HENSINGTON NH
Dee	
Simon Thomson	CAPRE of Sen. Ayotte
DIANE TEED	C-10 Research Education Foundation



**U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of License Renewal**

**SEABROOK STATION
LICENSE RENEWAL APPLICATION**

**Attendance List
September 15, 2011, 7:00 p.m. – 10:00 p.m.**

Name	Affiliation
Rep. Peter B. Schmidt	NH House
MUNDAL KEAR	SAPL
Kelsey Ward	NextEra Energy Services, COF
Robin Wilfitts	Self
Doris K. Lam - Hobe	Self
Charles - Paul	Self
Anastacia Barr	Self
William Barr	NextEra Energy Services
HERBERT S. MOYER	S.A.P.C. President
Sandra Cavittis	C-10 Foundation
Debbie Crimble	C-10 Foundation
Dorey Sogem	S.A.P.C.
Doree Anderson	SAPL member
Paul Guster	Beyond Nuclear
Edward Castle	NextEra Energy
Christopher S. Muel	C-10
Marcia Sawyer	Normandeau
Alan Griffith	NextEra Seabrook

Name	Affiliation
TERRY KLOASNIK	ST. OF NH.
Leslie Cliche	
RICHARD CLICHE	NEXTERA
Jim Pette	FPL
Ken Shaffner	
Sandra Keski	Citizen
SHA HABERMAN	Retired
CHRISTINE CRONIN	NEXTERA
HEATHER WOODS	NEXT ERA
Colin Nelson	C-10
Helen Athearn	Walk For Fukushima
Richard Bednar	Hampton resident
Ann Bednar	
Ben Rochester	
Thomas (Name)	

**AGENDA FOR PUBLIC MEETING TO DISCUSS THE
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR THE
LICENSE RENEWAL OF SEABROOK STATION**

THURSDAY, SEPTEMBER 15, 2011

Two Meeting Sessions - 1:30 p.m. to 4:30 p.m. and 7:00 p.m. to 10:00 p.m.*

- | | | |
|------|---|------------------------------|
| I. | Welcome and Purpose of Meeting | 10 minutes (Facilitator) |
| II. | Overview of License Renewal Process | 10 minutes (Michael Wentzel) |
| III. | Results of the Environmental Review | 25 minutes (Michael Wentzel) |
| IV. | How Comments can be Submitted | 5 minutes (Michael Wentzel) |
| V. | Public Comments | As Required (Facilitator) |
| VI. | Closing/Availability of Transcripts, etc. | 5 minutes (Facilitator) |

*The NRC staff will host informal discussions one hour prior to each meeting session. No formal comments on the Draft Supplemental Environmental Impact Statement (DSEIS) will be accepted during the informal discussions. To be considered, comments must be provided either at the transcribed public meetings (see agenda, above) or in writing, as described in the attached *Federal Register* Notice

ENCLOSURE 2

**Welcome to the NRC's Open House
Associated with the Environmental Review for the proposed
License Renewal of Seabrook Station, Unit 1**

This open house is intended to provide an opportunity for interested members of the public and staff from other Federal, State, and local agencies to interact with the NRC staff in an informal information exchange.

The NRC is gathering information necessary to prepare a Supplemental Environmental Impact Statement (SEIS) to the Generic Environmental Impact Statement (GEIS) for License Renewal of Nuclear Plants, regarding the proposed renewal of the operating license for Seabrook Station, Unit 1. Please note that if you wish to provide formal comments regarding the draft Supplemental Environmental Impact Statement (DSEIS), they must be presented at today's transcribed public meeting, or provided in writing or electronically by October 26, 2011. Comments received after this date will be considered if it is practicable to do so, but the NRC staff is able to assure consideration only for comments received on or before this date. Written comments on the DSEIS should be sent to:

Chief, Rules and Directives Branch
Division of Administrative Services
Office of Administration
Mailstop TWB-05-B01M
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Comments may be hand-delivered to the NRC at 11555 Rockville Pike, Rockville, Maryland, between 7:45 a.m. and 4:15 p.m. on Federal workdays. To submit electronic comments, go <http://www.regulations.gov> and search for Docket ID **NRC-2010-0206**. Please include Docket ID **NRC-2010-0206** in the subject line of your comments.

Thank you for your participation.

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Seabrook Station License Renewal
 Public Meeting - Afternoon Session

Docket Number: (n/a)

Location: Hampton, New Hampshire

Date: Thursday, September 15, 2011

Work Order No.: NRC-1120

Pages 1-104

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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PUBLIC MEETING TO DISCUSS
PRELIMINARY SITE-SPECIFIC RESULTS OF THE
LICENSE RENEWAL ENVIRONMENTAL REVIEW FOR
SEABROOK STATION

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Upper Great Hall
One Liberty Lane
One Liberty Lane East

Hampton, New Hampshire 03842

+ + + + +

Thursday, September 15, 2011
1:30 p.m.

FACILITATOR:

BRIAN ANDERSON

NRC STAFF PRESENTING:

MICHAEL WENTZEL, Environmental Project Manager, Office
of Nuclear Reactor Regulation

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

(1:32 p.m.)

1
2
3 BRIAN ANDERSON: Good afternoon. This is
4 the Nuclear Regulatory Commission public meeting to
5 discuss the Environmental Review related to the
6 license renewal application for Seabrook Nuclear Power
7 Station.

8 My name is Brian Anderson. I'll be the
9 facilitator for today's meeting.

10 The purpose of this meeting is to discuss
11 the staffs' Supplemental Environmental Impact
12 Statement -- the Draft Supplemental Environmental
13 Impact Statement for the license renewal at Seabrook
14 Nuclear Power Station.

15 NRC staff will make a short presentation
16 followed by a question and answer session, but the
17 main purpose of today's meeting is to hear your
18 comments. The NRC's review of the Seabrook license
19 renewal application is not yet complete. The comments
20 that are provided today and comments that are provided
21 after this meeting will be considered by NRC staff as
22 part of their issuance of the Final Supplemental
23 Environmental Impact Statement, which is scheduled for
24 next year.

25 I'd like to introduce some of the NRC

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1 staff members that are here today. I'll start with
2 Mr. Mike Wentzel. Mike is the Environmental Project
3 Manager for the Seabrook license renewal application.

4 Mr. Rick Plasse -- Rick is the Safety Project Manager
5 for the NRC's license renewal review. And Mr. Dave
6 Wrona -- Dave is Chief of the License Renewal Projects
7 Branch Number 2. Mike, Rick and Dave all work at the
8 NRC headquarters facility near Washington, DC.

9 I'd also like to introduce Diane Screnci -
10 - Diane is a Public Affairs officer who works out of
11 the NRC's Region 1 office near Philadelphia. Mr. Rich
12 Conte is Chief of the Engineering Branch Number 1.
13 Rich also works out of the NRC Region 1 office near
14 Philadelphia. And I'm not sure if he's in the room or
15 not -- Mr. Bill Raymond -- Bill --

16 BILL RAYMOND: Right here.

17 BRIAN ANDERSON: Right in front of me.
18 Bill is the Senior Resident Inspector at Seabrook
19 Nuclear Power Station.

20 For those that don't know, the NRC assigns
21 at least two Resident Inspectors at every operating
22 nuclear power plant in the United States. NRC
23 Resident Inspectors live in the local community and
24 they perform reactor safety inspections on a daily
25 basis at every nuclear power plant in the country.

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1 I'd like to go through a few housekeeping
2 items before we get into the meat of today's agenda.
3 You might've seen as you came in that there are copies
4 of the presentation material and other NRC brochures
5 and information on the tables out in the lobby --
6 please feel free to help yourself to copies of that
7 information for use either during or after this
8 meeting. Also, to help minimize distractions during
9 the presentation and comment period -- I'd ask that
10 everyone please silence your cell phones. Either turn
11 them off or put them into vibrate mode -- whatever you
12 prefer.

13 The agenda for today's meeting's going to
14 begin with a presentation by the NRC staff. We are
15 then going to have a short question-and-answer
16 session. The bulk of today's meeting is to hear your
17 comments. Because the main purpose of today's meeting
18 is to listen to comments provided by the public, we've
19 allotted 25-minutes for the NRC staff's presentation,
20 25-minutes for the question-and-answer period and then
21 the remaining two plus hours we'd like to dedicate to
22 the comment period.

23 During the question-and-answer period, the
24 NRC staff is prepared to talk about the review process
25 and the preliminary results of the Environmental

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1 Review for the Seabrook license renewal application.
2 There are a limited number of NRC staff technical
3 experts that are here today, so it's possible that NRC
4 staff won't be able to answer all questions that you
5 have. They'll do the best that they can and if there
6 are questions that they can't answer here today, NRC
7 staff is happy to take your contact information and
8 get back to you with an answer at some point after the
9 meeting.

10 Also, because there is a limited number of
11 NRC technical staff here during the comment period,
12 the NRC staff doesn't intend to address or respond to
13 comments at this meeting. NRC staff will provide
14 written responses to all comments received during this
15 meeting through the rest of the comment period after
16 they've had a thoughtful review of all the comments
17 that are provided.

18 Finally, before we get into the
19 presentation, I'd just like to cover a few ground
20 rules for the meeting. There's a relatively large
21 number of people that have signed up to make comments
22 today. So, to make sure that everybody has an equal
23 amount of time and gets a chance to provide their
24 comments here today, I'd like to ask that everybody
25 please be concise in providing your comments. I'd

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1 like to limit the comments to five-minutes -- if you
2 can keep your comment presentation to less than five-
3 minutes -- I want to make sure that everybody has an
4 equal chance to do that. If at the end, when
5 everybody's had a chance to make comments, if there's
6 anybody that needs more time, we'll certainly allow
7 that based on the time left in the meeting. But it's
8 important to us that everybody gets an equal chance to
9 provide comments here today.

10 We are also transcribing today's meeting
11 to make sure that we have a written record of what's
12 said here today. The court transcriptionist in the
13 back has some equipment set-up, so we want to make
14 sure that anybody that wants to speak, please speak
15 only into a microphone. When we get to the question-
16 and-answer period and the comment period, I'll provide
17 anybody that wants to speak with a microphone, but
18 that's very important that we have a clear written
19 record of what's said here today. It's also important
20 to only speak into a microphone just to make sure that
21 everybody in the room can hear what's being said.

22 For those same reasons, I'd also like to
23 ask that we only have one person speaking at a time.
24 I want to make sure that everybody can hear clearly
25 what's being said and that we have a good clear

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1 written record of what's discussed here today.

2 The last thing that I will mention is that
3 you might hear some opinions today that are different
4 from your own. Please let's all treat each other with
5 courtesy and respect.

6 So, just, I think to summarize what the
7 ground rules I'd like to use here for the meeting --
8 if we could just be concise and limit your comments to
9 five-minutes -- we'll allow more time if there's more
10 time left at the end; please use a microphone if you
11 wish to talk; let's only have one person speak at any
12 one time; and let's treat each other with courtesy and
13 respect during this meeting. Those all sound like
14 ground rules that we can live with?

15 Great -- thanks.

16 I will go ahead and let the NRC staff get
17 into their presentation and I'll turn things over to
18 Mike Wentzel.

19 MICHAEL WENTZEL: Good afternoon
20 everybody. My name is Mike Wentzel. I am the Project
21 Manager at the NRC responsible for coordinating all of
22 the Environmental Review activities for the Seabrook
23 Station license renewal application. I will say
24 something just real quick -- I don't have a good view
25 of the slides, so if what I'm saying seems out of sync

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1 with the slides -- if people would just let me know,
2 I'll see if I can get that corrected.

3 On August 1st, the NRC published its Draft
4 Supplemental Environmental Impact Statement -- also
5 known as the Draft SEIS -- related to the Seabrook
6 Station license renewal Environmental Review. The
7 Draft SEIS documents the NRC's preliminary review of
8 the environmental impacts associated with renewing the
9 license for Seabrook Station for an additional 20-
10 years and today I'm going to present to you those
11 results.

12 I hope that the information provided will
13 help you understand what we've done so far and the
14 role that you can play in helping us to make sure that
15 the Final Impact Statement is accurate and complete.

16 Here's the agenda for today's meeting. I
17 will discuss the Agency's regulatory role; the
18 preliminary findings of our Environmental Review
19 including power generation alternatives that were
20 considered; I will present the current schedule for
21 the remainder of the Environmental Review and how you
22 can submit your comments outside of this meeting.
23 From there, I will take time to briefly discuss two
24 topics that are not related to the Environmental
25 Review, but are of some interest to those in

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1 attendance -- those are the concrete issues at
2 Seabrook and the NRC's response to Fukushima.

3 At the end of the presentation, there will
4 be time for questions and answers on the Environmental
5 Review process and most importantly, time for you to
6 present your comments on the Draft SEIS.

7 Now, the NRC was established to regulate
8 civilian uses of nuclear material including facilities
9 that produce electric power. The NRC conducts license
10 renewal reviews for plants whose owners wish to
11 operate them beyond their initial license period. The
12 NRC license renewal reviews address safety issues
13 related to managing the effects of aging and
14 environmental issues related to an additional 20-years
15 of operation. In all aspects of the NRC's regulation,
16 the Agency's mission is threefold: to ensure adequate
17 protection of public health and safety; to promote
18 common defense and security; and to protect the
19 environment.

20 Now, we're here today to discuss the
21 potential site-specific impacts of license renewal for
22 Seabrook Station. The Generic Environmental Impact --
23 also referred to as the GEIS -- examines the possible
24 environmental impacts that could occur as a result of
25 renewing licenses of individual nuclear power plants

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1 under 10 CFR Part 54. The GEIS, to the extent
2 possible, establishes the bounds and significance of
3 these potential impacts. The analyses in the GEIS
4 encompass all operating light-water power reactors.
5 For each type of environmental impact, the GEIS
6 attempts to establish generic findings covering as
7 many plants as possible.

8 For some environmental issues, the GEIS
9 found that a generic evaluation was not sufficient and
10 that a plant specific analysis was required. The
11 site-specific findings for Seabrook are contained in
12 the Draft SEIS that we issued on August 1st of this
13 year. This document contains analyses of all
14 applicable site-specific issues, as well as a review
15 of the issues covered by the GEIS to determine whether
16 or not the conclusions in the GEIS are still valid for
17 Seabrook Station.

18 In this process, the NRC staff also
19 reviews the environmental impacts of potential power
20 generation alternatives to license renewal to
21 determine whether the impacts expected from license
22 renewal are unreasonable.

23 For each environmental issue identified,
24 an impact level is assigned. The NRC standard of
25 significance for impacts was established using the

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1 White House Council on Environmental Quality
2 terminology for 'significant'.

3 The NRC established three levels of
4 significance for potential impacts: Small, Moderate
5 and Large. They're defined here on the slide. For a
6 Small impact -- the effects are not detectable or are
7 so minor that they will neither destabilize nor
8 noticeably alter any important attribute of a
9 resource. For a Moderate impact -- the effects are
10 sufficient to alter noticeably, but not to destabilize
11 important attributes of the resource. And for a Large
12 impact -- the effects are clearly noticeable and are
13 sufficient to destabilize important aspects of a
14 resource.

15 This slide lists the site-specific issues
16 the NRC staff reviewed for the continued operation of
17 Seabrook Station during the proposed license renewal
18 period. As discussed in the previous slide, each
19 issue is assigned a level of environmental impact of
20 Small, Moderate or Large by the environmental
21 reviewers. The staff's preliminary conclusion is that
22 the site-specific impacts related to license renewal
23 for aquatic resources is Small for most species and
24 Large for winter flounder, rainbow smelt and some kelp
25 species due to the impact of the operation of Seabrook

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1 Station's once-through cooling system.

2 Similarly, for protected species and
3 habitats -- the staff's preliminary conclusion is that
4 the impacts related to license renewal are Small for
5 most species and Large for rainbow smelt -- a species
6 identified by the National Marine Fishery Service as a
7 species of concern. For all other resource areas, the
8 impacts are Small.

9 Now, when reviewing the potential impacts
10 of license renewal on the environment, the NRC staff
11 also looks at the effects on the environment from
12 other past, present and reasonably foreseeable future
13 human actions. These effects, referred to as
14 Cumulative Impacts, not only include the operation of
15 Seabrook Station, but also impacts from activities
16 unrelated to Seabrook -- such as the development of
17 the East Coast Greenway, commercial fishing and
18 climate change. Past actions are those related to the
19 resources at the time of the power plant's licensing
20 and construction. Present actions are those related
21 to resources at the time of the current operation of
22 the power plant. Future actions are considered to be
23 those that are reasonably foreseeable through the end
24 of the plant operation, including the period of
25 extended operation.

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1 Therefore, the analysis considers
2 potential impacts through the end of the current
3 license renewal term, as well as the 20-year renewal
4 period. While the level of impacts due to direct and
5 indirect impacts of Seabrook Station on aquatic
6 resources is Small for most species and Large for
7 winter flounder, rainbow smelt and some kelp species -
8 - the cumulative impact when combined with all other
9 sources, such as pressure from commercial fishing and
10 effects from climate change, would be Moderate for
11 most species and Large for winter flounder, rainbow
12 smelt and other species that would be adversely
13 affected by climate change. In the other areas the
14 staff considered -- the staff's preliminary conclusion
15 is that the cumulative impacts are Small.

16 The National Environmental Policy Act --
17 also known as NEPA -- mandates that each Environmental
18 Impact Statement consider alternatives to any proposed
19 major federal action. A major step in determining
20 whether license renewal is reasonable or not is
21 comparing the likely impacts of continued operation of
22 the nuclear power plant with the likely impacts of
23 alternative means of power generation. Alternatives
24 must provide an option that allows for power
25 generation capability beyond the term of current

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1 nuclear power plant operating license to meet future
2 system generating needs. In the Draft Supplement, the
3 NRC staff initially considered (16) different
4 alternatives. After this initial consideration, the
5 staff then chose the three most likely and analyzed
6 those in depth.

7 Finally, the NRC staff considered what
8 would happen if no action is taken and Seabrook
9 Station shuts down at the end of its current license
10 without a specific replacement alternative. This
11 alternative would not provide power generation
12 capacity nor meet the needs currently met by Seabrook
13 Station.

14 The NRC's preliminary conclusion is that
15 there is no clear environmentally preferred
16 alternative to license renewal. All alternatives
17 capable of meeting the needs currently served by
18 Seabrook Station entail impacts greater than or equal
19 to the proposed action of license renewal.

20 Based on the review of the likely
21 environmental impacts from license renewal -- as well
22 as potential environmental impacts of alternatives to
23 license renewal -- the NRC staff's preliminary
24 recommendation in the Draft SEIS is that the
25 environmental impacts of license renewal for Seabrook

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1 Station are not great enough to deny the option of
2 license renewal.

3 Now, I would like to emphasize that the
4 Environmental Review is not yet complete. Your
5 comments today and all written comments received by
6 the end of the comment period on October 26th will be
7 considered by the NRC staff as we develop the Final
8 SEIS, which we currently plan to issue in March of
9 2012. Those comments that are within the scope of the
10 Environmental Review and provide new and significant
11 information can help to change the staffs' findings.
12 The Final SEIS will contain the staff's final
13 recommendation on the acceptability of license renewal
14 based on the work we've already performed and any new
15 and significant information that we receive in the
16 form of comments during the comment period.

17 Now, as we stated earlier, I'm the primary
18 contact for the Environmental Review. My colleague,
19 Rick Plasse, is the primary contact for the Safety
20 Review. Hard copies of the Draft SEIS are available
21 in the entryway -- where you came in -- as are copies
22 on CD-ROM. In addition, the Seabrook and the Amesbury
23 Public Libraries have agreed to make hard-copies
24 available for your review. You can also find
25 electronic copies of the Draft SEIS along with other

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1 information about the Seabrook Station license renewal
2 review online at the address provided on the slide.

3 The NRC staff will address written
4 comments in the same way we address spoken comments
5 received today. You can submit written comments
6 either online or via conventional mail. To submit
7 written comments online, visit the web site --
8 regulations.gov and search for Docket ID NRC-2010-
9 0206. If you have written comments this evening, you
10 may also give them to any NRC staff member.

11 Now, before we open up the meeting for
12 questions and comments, I wanted to take some time to
13 briefly discuss two topics that are of some interest
14 to those in attendance -- that's the concrete
15 degradation at Seabrook and the NRC's response to
16 Fukushima. While these issues are not related to the
17 Seabrook Station license renewal Environmental Review
18 and are therefore not specifically addressed in the
19 Draft SEIS, they are issues that are being actively
20 addressed through other relevant Agency processes.

21 Now, for concrete degradation -- the
22 alkali-silica reaction -- referred to as ASR -- is a
23 process that could occur in some forms of concrete
24 that have been exposed to water for long periods of
25 time. ASR can cause expansion and cracking in

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1 concrete structures. During the course of the license
2 renewal review, ASR related degradation was found at
3 Seabrook. As discussed at the annual assessment
4 public meeting on June 8th, there are no immediate
5 safety concerns associated with ASR at Seabrook. NRC
6 has found no problems with any electrical system,
7 piping or any other component as a result of ASR and
8 the concrete walls continue to perform within design
9 specifications. Evaluation of ASR and its impact on
10 license renewal is being addressed as part of the
11 Safety Review.

12 Additionally, the NRC has requested
13 NextEra explain how it intends to manage the effect of
14 aging associated with ASR. The NRC has delayed the
15 license renewal Safety Review until NextEra completes
16 its evaluation and addresses the staffs' questions.
17 The NRC will not make a decision on license renewal
18 before it fully understands both the issues with ASR
19 affected structures and NextEra's plan to address the
20 issues.

21 Now, since the accident at Fukushima, the
22 NRC has taken multiple steps to ensure the safe
23 operation of nuclear power plants both now and in the
24 future. As part of its initial response to the
25 accident, the NRC issued temporary instructions to our

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1 inspectors directing specific inspections at nuclear
2 power plants to assess disaster readiness and
3 compliance with current regulations. The next step in
4 the NRC's response was the report of the NRC Near-Term
5 Task Force. The purpose of the Near-Term Task Force
6 was to develop near-term recommendations and suggest a
7 framework for us to move forward within the longer
8 term.

9 The Near-Term Task Force issued its report
10 on July 12th and discussed the results of their review
11 at a public meeting on July 28th. As a result of its
12 review, the Near-Term Task Force presented (12) over-
13 arching recommendations for improvement. These
14 recommendations are applicable to operating reactors
15 regardless of license renewal status. Based on the
16 results of the Near-Term Task Force, the Commission
17 has directed the NRC staff to evaluate and outline
18 which of the recommendations should be implemented.

19 The staff recently submitted a paper to
20 the Commission on September 9th, providing the staffs'
21 recommendation of which Task Force recommendations can
22 and -- in the staffs' judgment -- should be initiated
23 in part or in whole without delay. On October 3rd,
24 the staff will submit another Commission paper on its
25 prioritization of (11) of the (12) Task Force

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1 recommendations.

2 Recommendation number 1 -- the
3 recommendation to reevaluate the NRC's regulatory
4 framework will be evaluated over the next 18-months.
5 To date, the NRC has not identified any issues as part
6 of these activities that calls into question the
7 safety of any nuclear facility. Additionally, the
8 review process is going on independent of license
9 renewal. Any changes that are identified as necessary
10 will be implemented for all licensees regardless of
11 license renewal status.

12 More information on the NRC's post-
13 Fukushima activities -- including the results of the
14 Near-Term Task Force -- can be found on the NRC's web
15 site by clicking the link -- Japan nuclear accident's
16 NRC actions -- or directly through the web address
17 that's on this slide. Also, there are a limited
18 number of copies of the Near-Term Task Force report
19 that are available at the back of the room -- actually
20 outside the door.

21 Additionally, there are question and
22 answer sheets related to Fukushima and Seabrook for
23 those that are interested.

24 So, that completes my presentation for
25 today. I am going to turn the meeting back over to

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1 Brian for question and answer.

2 BRIAN ANDERSON: Thank you, Mike. Does
3 anyone have any questions about the presentation or
4 the preliminary results of the Seabrook license
5 renewal Environmental Review?

6 Yes, sir. And if you could, would you
7 please, for the record, give your name and ask your
8 question.

9 BRUCE SKUD: Bruce Scud -- for Mr. Wentzel
10 -- you were kind enough to provide information on your
11 slide here about further information for NRC response
12 to Fukushima -- do you have any further information
13 site available for concrete degradation?

14 MICHAEL WENTZEL: We don't have a web site
15 in particular set-up for that. We do have the
16 inspection report that is available for reviewing
17 online. It's through the Web-based ADAMS. Actually,
18 anything that's going to be related to that that's
19 found out later will be published on there.
20 Additionally, anything that the staff -- for the issue
21 of license renewal -- anything that's reviewed
22 relating to ASR will also be available on web-based
23 ADAMS. But we do not have a specific web site set-up
24 for that.

25 BRIAN ANDERSON: Sir, if we took your

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1 contact information, we could provide you with
2 specific numbers through the NRC web site that would
3 allow you to access those reports and that
4 information. Would that be useful to you?

5 BRUCE SKUD: Yes it would, thank you.

6 BRIAN ANDERSON: Okay.

7 RAYMOND SHADIS: Thank you. I may have
8 missed this in your presentation, but is there a
9 working group within NRC that is specifically tasked
10 with lessons learned from Fukushima as it would apply
11 to license renewal?

12 BRIAN ANDERSON: Sir, would you mind
13 giving us your name -- just for the record.

14 RAYMOND SHADIS: Sure, my name is Raymond
15 Shadis. I'm representing interveners in the Seabrook
16 licensing renewal process -- Friends of the Coast from
17 the state of Maine and also New England Coalition from
18 the state of Vermont.

19 BRIAN ANDERSON: Thank you, Raymond.

20 NRC staff -- the question is -- is there a
21 task force or an NRC group looking at Fukushima --
22 future efforts, specifically as it relates to license
23 renewal. Is that --

24 RAYMOND SHADIS: Lessons learned.

25 BRIAN ANDERSON: Lessons learned.

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1 MICHAEL WENTZEL: I would have to say I'm
2 not aware of any task force that's specifically
3 looking at lessons learned from Fukushima as it
4 relates to license renewal. License renewal -- we
5 look at managing the effects of aging. I think any
6 lessons learned that are applicable that come out of
7 the review will be applied to any licensee and I think
8 if there was to be some sort of license renewal
9 specific lesson learned that was identified, it would
10 be applied as appropriate.

11 BRIAN ANDERSON: Yes, ma'am. If you could
12 please give us your name.

13 DEBBIE GRINNELL: Debbie Grinnell -- I'm
14 with the C-10 Foundation. After Fukushima, we have
15 now added three more core melts that need to be
16 factored into -- I think it's now up to five -- in
17 evaluating or recalculating your mass and that
18 pertains to the relicensing process. So, is anyone
19 doing those calculations and they need to be done
20 before you relicense any other plants post-Fukushima.

21 BRIAN ANDERSON: NRC staff -- any specific
22 information as it relates to core melt frequency given
23 the Fukushima events this year?

24 MICHAEL WENTZEL: I'm afraid I didn't
25 really understand what the question was.

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1 DEBBIE GRINNELL: You use incidents in --

2 BRIAN ANDERSON: Debbie -- here's the
3 microphone.

4 DEBBIE GRINNELL: You use incidents in
5 evaluating and doing the mass in terms of predicting
6 the risk, so I don't know who's doing that at the NRC,
7 but I'm assuming that because now we have factual
8 information -- we have three additional core melts --
9 that that has to be factored into your evaluations and
10 predictability of the risk.

11 BRIAN ANDERSON: Debbie -- we may need to
12 get back to you with a better answer. Diane -- do you
13 have anything that you can add or help out with here?

14 MICHAEL WENTZEL: I would say it almost
15 sounds like a comment that's related to
16 [indiscernible] --

17 BRIAN ANDERSON: Mike -- is your mic on?

18 MICHAEL WENTZEL: Okay -- there we go.
19 I'd say that really sounds like a comment. I don't
20 have a specific answer to that question, but it sounds
21 like that may be a comment that would be worth
22 submitting this evening or whenever you want.

23 DAVE WRONA: We can take it as a comment.

24 MICHAEL WENTZEL: Right -- absolutely.
25 And actually, we can take -- and Dave's absolutely

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1 right -- you've already provided the comment. We can
2 handle this as a comment and address it as part of the
3 Final.

4 BRIAN ANDERSON: So, Debbie, the NRC staff
5 is going to take your question as a comment, but also
6 look into it and get back to you with information, if
7 that's okay with you.

8 DEBBIE GRINNELL: When you re-draft the
9 calculations, I'd like to see those.

10 BRIAN ANDERSON: Well, the NRC staff will
11 also take that as a comment and follow-up on it. Does
12 anybody else have any questions related to the
13 presentation material or review process? Yes, sir.

14 THOMAS POPIK: Hello, my name is Thomas
15 Popik. I'm with the Foundation for Resilient
16 Societies. I'm looking at Table F.1 from the Draft
17 EIS -- this is titled *Seabrook CDF for Internal and*
18 *External Events*. I guess my first question is -- CDF,
19 that stands for Core Damage Frequency -- is that
20 correct?

21 BILL RAYMOND: Yes.

22 THOMAS POPIK: Okay, thank you. So
23 there's a number of events here and the first one is:
24 LOOP due to weather. I believe that stands for Loss
25 Of Outside Power -- is that correct?

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1 MICHAEL WENTZEL: Yes, that is correct.

2 THOMAS POPIK: Okay. The CDF per year
3 here is 1.5×10^6 . I also see: LOOP due to grid
4 related events -- 9.0×10^{-7} -- any place in this EIS is
5 there the frequency for the initiating events?

6 MICHAEL WENTZEL: I'm not really sure.
7 I'm not a PRA expert. I'm definitely not a SAMA
8 expert, so I can't answer that question specifically.

9 I would be happy to -- I'm almost positive that we
10 have that information either submitted through the
11 applicant or in the EIS, but I can't point to it
12 specifically. That's something that if you want to
13 give me your contact information, I can find that out
14 and let you know where that information can be found.

15 THOMAS POPIK: Okay, thank you. I have a
16 follow-up. Seems to me that that would be critical
17 information for the public to know, but I'll talk
18 about that later on in my comment. I would ask -- as
19 a follow-up question -- is the impact of a great
20 geomagnetic storm -- similar to the Carrington event
21 or other solar disturbances that we have had --
22 incorporated in any of the initiating event
23 frequencies?

24 MICHAEL WENTZEL: Again, I'm not an expert
25 on that. That's something else I can look into and

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1 let you know.

2 THOMAS POPIK: Okay, thank you.

3 BRIAN ANDERSON: Sir, thank you for those
4 questions. NRC staff will take those as comments, but
5 also follow up with answers once they've had a chance
6 to consult with technical experts back at NRC
7 headquarters.

8 Sir, I'll come right back to you. I saw
9 this hand here.

10 MAX ABRAMSON: My name is Max Abramson.
11 I'm a member of the Seabrook Budget Committee speaking
12 on my own behalf. I just have two questions that I
13 think might require more in-depth follow-up. The
14 first one is -- what types of natural disasters are
15 likely at the Seabrook Station considering we're right
16 on the Atlantic seaboard and what is being done in
17 this regulatory environment to respond to that?

18 The second question is -- nearly all
19 countries that I'm aware of that use nuclear fission
20 recycle spent nuclear fuel. I think I saw a
21 documentary on this and I think only the U.S. and
22 Russia still bury it. The Seabrook Station is burying
23 spent fuel on-site -- are there regulations being
24 offered that will allow American reactors to recycle
25 waste?

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BRIAN ANDERSON: Thank you for those questions. Were you looking to have answers to those questions now or are those like comments that you wanted to submit as part of this meeting?

MAX ABRAMSON: I'd be willing to have the answers come in later.

BRIAN ANDERSON: Okay. What I would suggest -- let the NRC staff take those questions as comments and provide written responses along with the rest of the comments. But, I'll look to the NRC staff if there's an answer that can be given now to either of the questions.

I believe the first question was about local disaster -- site-specific type natural disasters -- and the second question was related to reprocessing of fuel.

Bill -- would you --

BILL RAYMOND: So, in order to build a nuclear power plant at Seabrook or any other site in the country, there is a site characterization study that is done and that's a matter of public record. That's in a document called the Final Safety Analysis Report. So, it describes the type of events, features at the site, what sort of events are expected to occur

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1 during the course of the site's lifetime to include
2 seismic event, rain events, storm events, etc. That
3 information has been published and is available for
4 review. If you need help on locating that, we can
5 certainly help you get to that.

6 So at least that's the first of your two
7 questions.

8 DENNIS MOREY: I'm Dennis Morey. I'm
9 Chief of the Project Branch 1. Since I just moved
10 over from NMSS I can answer your second question. I
11 can tell you that the NRC has a rule-making effort
12 underway for recycling, but I can't tell you any
13 details. It was in a different division.

14 BILL RAYMOND: Let me take that back.
15 Max, if I may too, in response to your second question
16 -- you did indicate that the spent-fuel is being
17 buried at the site -- so there's a key distinction.
18 Spent-fuel at Seabrook is stored either wet storage in
19 the spent-fuel pool -- that's a part of the seismic
20 qualified buildings there. But a portion of the fuel
21 that's been generated since the plant began to operate
22 has also been moved from wet storage to dry storage
23 sitting on concrete pads on the site property. I just
24 want to make the -- but neither one of those are
25 burial, if you will. So that's as it exists right now

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1 at Seabrook.

2 BRIAN ANDERSON: Max, thank you again for
3 those questions. NRC staff will provide written
4 responses to those as comments as well. Does anyone
5 else have questions? Yes, ma'am.

6 LEE ROBERTS: As a simple citizen of New
7 Hampshire within the 10-mile radius area -- which is
8 the dangerous area -- I have to say, just as a
9 preliminary comment, that I am concerned that there
10 isn't a lot more coverage. We know after the
11 Fukushima disaster that they've widened that range
12 enormously. The question that I have is regarding how
13 it is determined what natural disaster could happen
14 here? That is something that one really finds very
15 difficult. I don't imagine that in Japan they thought
16 about what has happened there -- ever. I've spoken to
17 many Japanese who are just horrified at what happened
18 in their country and I want to say that I am horrified
19 because I feel that we are in much greater danger than
20 is being admitted by this regulatory agency. I feel
21 that it's very hard to determine just what could
22 happen and I wonder how you think you're going to do
23 that? Thank you.

24 BRIAN ANDERSON: Thank you for your
25 question. Can we have your name for the record

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1 please?

2 LEE ROBERTS: My name is Lee Roberts and
3 I'm just Ms. New Hampshire citizen. Thank you.

4 BRIAN ANDERSON: Thank you, Lee. I want
5 to look to the NRC staff -- I think maybe Bill you had
6 just talked about the site characterization study
7 that's part of the Final Safety Analysis Report.
8 Maybe in responding to this question you can talk a
9 little bit about how that addresses local natural
10 disaster frequency and then also maybe in your role as
11 Senior Resident Inspector, you can talk a little bit
12 about how emergency planning zones are set-up and how
13 the site characterization study is taken into account
14 for emergency planning.

15 BILL RAYMOND: So, for Seabrook, as well
16 as all plants -- the potential for seismic activity is
17 studied. They do an evaluation to look at the worst-
18 case seismic events that have been recorded in that
19 specific area in the past. They then take that
20 information and apply a conservative factor on top of
21 that to establish what the seismic design basis for
22 the plant will be to which they're going to build the
23 structures. And that has been done for Seabrook --
24 yes, ma'am.

25 LEE ROBERTS: Can I just add a comment to

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1 that? I don't know how one can exactly judge what's
2 going to happen in the future. We --

3 BRIAN ANDERSON: Lee, if you can hold on
4 just a second. I'll bring a microphone back to you.
5 Thanks.

6 LEE ROBERTS: Sorry. I know I have a loud
7 voice, but I guess not loud enough. I just wanted to
8 say that I don't see how one can really just
9 scientifically go back and decide that this is all
10 that's going to happen. I don't think they would have
11 come up with the answer in Japan and I don't think we
12 can necessarily come up with an answer here. Because
13 we have all sorts of environmental issues that no one
14 expected. Nobody's expected the tornadoes we've had.
15 Nobody's expected some of the hurricanes we've had.
16 Nobody's been able to prophesize what would happen in
17 terms of something like a tsunami. I don't expect
18 that here, but we have had things happen in New York
19 City, for instance, that have never happened before.
20 It's possible. I think we're in great danger.

21 BRIAN ANDERSON: Thank you, Lee. I can
22 tell that you're very passionate about this and that
23 this is something that concerns you. What I'd like to
24 do is ask the NRC staff to take your questions as
25 comments to provide written responses for, but also

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1 look to Bill Raymond one more time to see if there's
2 anything else that he can do to answer those
3 questions.

4 LEE ROBERTS: I'm a mother and a
5 grandmother and a neighbor and I know there are many,
6 many people who are not here today speaking their
7 minds because they think it won't do any good because
8 we don't really get listened to. I'm here to try to
9 make you understand that we are concerned -- very
10 concerned about allowing a license to continue when we
11 know there are so many problems at this place. We had
12 those spent rods, among a zillion other things. I'm
13 no scientist, but I just know that if one uses one's
14 head, one knows we're in trouble. Thank you.

15 BRIAN ANDERSON: Thank you very much for
16 those questions and comments and thank you for being
17 here and sharing that with us. Thank you. Let me
18 look back to Bill one more time to -- it's actually
19 important that we speak into a microphone for the
20 record.

21 BILL RAYMOND: Thank you again for your
22 comments and I do appreciate your concerns and we are
23 here to hear you. I don't want you to feel that it's
24 falling on deaf ears. We are not clairvoyant and
25 being able to look to the future, but we do use our

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1 technology and science to look backwards to see what
2 has happened. But, having done that, we don't stop
3 there.

4 When new information becomes available, we
5 try to learn from that and what is happening in this
6 country and elsewhere as a result of the events that
7 have happened -- on the seismic events at Fukushima.
8 We haven't mentioned it, but prior to the Fukushima
9 event, there was a study that was in progress in this
10 country looking at the seismic hazard within the
11 continental United States. That's an effort that's in
12 progress. We'll use the information from Fukushima to
13 revalidate whether or not the design and licensing
14 basis that have already been established -- which we
15 believe have established an adequate basis for safe
16 plant operation, so it won't hurt public health and
17 safety -- is in place and remains adequate. If it's
18 not adequate, we'll try to address it. So, there's
19 processes in place for that.

20 I see other questions.

21 BRIAN ANDERSON: Yes, sir. I knew you had
22 a question. Does anybody else have a question about
23 the presentation from today or the process that the
24 NRC's doing to review the rest of this? Yes, sir.

25 PAUL GUNTER: Do you mind if I -- so we

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1 can have a little bit of exchange, so you don't have
2 to -- I'll save you some steps if I can come up here?

3 BRIAN ANDERSON: I'm happy to walk back
4 and forth.

5 PAUL GUNTER: Okay.

6 BRIAN ANDERSON: It's part of the job
7 description.

8 PAUL GUNTER: All right. And could I get
9 your name, sir?

10 BILL RAYMOND: Bill.

11 PAUL GUNTER: Bill? Okay. My name's Paul
12 Gunter. I'm with Beyond Nuclear and we're one of the
13 interveners in the license renewal application that's
14 before the U.S. Nuclear Regulatory Commission. And
15 we've also been one of (23) organizations that have
16 petitioned the NRC to put a pause in its review of
17 this license extension and new license applications
18 because there are so many questions with regards -- a
19 lot of questions, but specifically to the seismic
20 issue now. So, just for the record, the safety
21 evaluation you're doing is Generic Safety Issue-199 --
22 is that it? Is it GSI-199?

23 BILL RAYMOND: Yes.

24 PAUL GUNTER: Okay. So, I'll just, for
25 the record, you're saying GSI-199 is the reevaluation

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1 of seismic activity for U.S. nuclear power stations.
2 Now, we just had an earthquake on August 23rd.
3 Actually, I live down in Washington, D.C. and I
4 watched the salt and pepper shaker dance on my kitchen
5 table. That was 90-miles away from the epicenter in
6 Mineral, Virginia, which is where the North Anna
7 Nuclear Power Station is located and just 11-miles
8 from this earthquake -- an unprecedented, unexpected
9 earthquake and very likely just a precursor event of
10 something bigger or, perhaps, the same.

11 So, your Agency is now reevaluating the --
12 and in this case at North Anna, in fact, the
13 earthquake exceeded the design qualification for the
14 plant. Now, I know that's a little like being 10-
15 pounds overweight in an elevator -- it doesn't mean
16 it's necessarily going to fall to the basement, but it
17 did exceed a safety standard. And there are margins
18 within that safety standard.

19 But, my question and my concern is that we
20 don't know -- you don't know -- you have not even
21 finished your evaluation and yet this proceeding goes
22 forward. It's like watching something on a conveyor
23 belt and when regulation and licensing processes
24 operate on conveyor belts, it speaks more to your
25 schedule and the industry's agenda than it does to

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1 public health and safety and environmental concerns.
2 So, I would like you to justify why the Agency is
3 proceeding with this conveyor belt kind of mentality
4 for this proceeding -- your Environmental Impact
5 Statement -- when you don't even have answers to
6 inform your Environmental Impact Statement about
7 seismic qualifications of this facility.

8 BRIAN ANDERSON: Sir, thank you for those
9 comments and that question. Most of that, I think, is
10 important for the NRC staff to capture as comments.

11 PAUL GUNTER: But, it's a part of the
12 process. I'm talking specifically -- what I'm
13 addressing here is specifically your process. The
14 process by which you're more concerned about a
15 schedule -- you're more concerned about an industry's
16 production agenda than you are actually about
17 qualifying your own Environmental Impact Statement.
18 That's a schedule question. And so, I think that you
19 should be accountable to address this body and other
20 bodies as to why you're schedule driven, when we have
21 such precedent as the North Anna earthquake and the
22 Fukushima accident?

23 BRIAN ANDERSON: Thank you, for those
24 comments and that question. Dave, I think at the
25 heart of this the question is -- with ongoing reviews

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1 in other areas, how is it that the NRC process allows
2 the license renewal review to continue forward with
3 other pending reviews?

4 DAVE WRONA: I just wanted to mention that
5 there is a petition in front of the NRC to halt
6 license renewal and other reviews. We are in the
7 process of reviewing that. The Agency is concerned
8 with --

9 PAUL GUNTER: You denied it --

10 LEE ROBERTS: You denied it.

11 PAUL GUNTER: You denied it. Let's get
12 current.

13 LEE ROBERTS: Come on.

14 DAVE WRONA: Okay. Let me get back to
15 that in a second. And yes -- yes --

16 LEE ROBERTS: Just answer the question.

17 BRIAN ANDERSON: Ladies and gentlemen --

18 DAVE WRONA: No --

19 LEE ROBERTS: It's a processing concern.

20 BRIAN ANDERSON: Ladies and gentlemen --

21 LEE ROBERTS: It isn't being processed,
22 it's been denied.

23 DAVE WRONA: Okay.

24 BRIAN ANDERSON: Ladies and gentlemen,
25 thank you all for being here. We want to make sure

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1 that your voice is heard, but it's very important to
2 us to have a clear record of what's said here today.

3 UNIDENTIFIED SPEAKER: Correct it then.

4 LEE ROBERTS: That was just
5 [indiscernible] --

6 DAVE WRONA: I'm going to come back to
7 that. I'm going to come back to that, please.

8 BRIAN ANDERSON: We want to make sure we
9 have a clear written transcript of what's being said
10 here today and in order to have that happen, I need to
11 make sure that only one person speaks at a time. I
12 very much appreciate your passion and being here to
13 provide comments with us. Please work with the NRC
14 staff to ensure that only one person's speaking at a
15 time.

16 LEE ROBERTS: [indiscernible]

17 BRIAN ANDERSON: Thank you.

18 DAVE WRONA: The NRC is also concerned
19 with seismic and flooding events due to Fukushima and
20 what's happened in Mineral, Virginia. Our task force
21 on the Fukushima event -- those are areas -- and
22 including emergency preparedness -- are being
23 specifically addressed during that report.

24 In terms of halting license renewal -- the
25 Agency is determined that we have ongoing processes

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1 that are looking at these issues. When we go forward
2 with that and determine if actions need to be taken or
3 don't need to be taken -- they will be put in place
4 irrespective of license renewal. Whether the plant
5 has a renewed license, is currently being reviewed by
6 us or has already been reviewed by us. So, our
7 ongoing oversight is going to address those issues and
8 as things come up and we need to take action, we're
9 going to take it through that process, not the license
10 renewal process.

11 BRIAN ANDERSON: Yes, sir, there's a new
12 question in back. I'll come back to you.

13 STEVEN ATHEARN: Hi. My name is Stephen
14 Athearn. I'm walking from Rockland to Boston to the
15 Japanese consulate. This was initiated by my wife,
16 who's from Fukushima prefecture. My question concerns
17 a -- we're looking at natural disasters that we might
18 not be able to perceive, but there's a very
19 foreseeable factor that I don't see being talked about
20 and that is the general fact that all of our main
21 energy resources are finite and subject to permanent
22 decline. I mean, they've been rising for all the time
23 that we've been in our current model -- we have a
24 model of continuous growth forever and these things
25 have been rising for 150-years or 450 years, depending

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1 on how you look at it. But, they're all finite and
2 subject to decline.

3 I just wonder if there's been any study of
4 the impact -- we're not talking just about
5 electricity, but of general energy decline -- on the
6 ability to manage nuclear power? So, that's my
7 question.

8 BRIAN ANDERSON: Sir, just to make sure I
9 understand the question -- how does the NRC review
10 process take into account -- when you say an energy
11 decline, could you say more about that?

12 STEVEN ATHEARN: Yes. For example, the
13 Middle East now, which in all the projections is
14 supposed to supply our growing needs for oil -- I know
15 oil is only 3% of electricity, but I'm talking about,
16 in general -- this is a major, major thing that will
17 impact our society. There was a report in 2005
18 published by the Department of Energy, which used the
19 word 'unprecedented' three times in its abstract. I
20 think that usage of words is itself unprecedented in a
21 government report, but we're talking about major
22 impacts on society and we're planning as if we're just
23 going to go on in this trajectory now.

24 So, my question is -- has the NRC done any
25 study whatsoever on the impacts of declining resources

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1 that could permanently end economic growth and whether
2 -- it's expensive to decommission plants now and it's
3 almost bankrupting a rich country to -- we don't know
4 if Japan can clean-up from this disaster that it's
5 undergone. If that's the case now, when energy is
6 available in the amounts that we're used to and that
7 we need, in the sense that we've built our society to
8 rely on them. We have to look at that question about
9 what's going to happen -- our ability to manage these
10 things. We talk about managing the waste of nuclear
11 facilities. But that's a big question, whether we can
12 do that. So, I want to know whether there's anybody
13 here that has discussed -- not necessarily in this
14 room, but whether the NRC has studied or is intending
15 to study the general impacts of energy decline on our
16 ability to manage nuclear power plants safety.
17 Thanks.

18 BRIAN ANDERSON: I don't know if Mike --
19 Dave -- either of you have an answer to energy
20 resources future management?

21 DAVE WRONA: Well, as resources are needed
22 to safely operate and decommissioning nuclear reactor
23 plants, the NRC's mandate is exactly that. In terms
24 of for the country -- our mission is limited to
25 protecting the public health and safety for civilian

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1 use of nuclear materials. So, in terms of us looking
2 forward for the need for power or for the need if
3 oil's gone and the need if wind is being used -- it's
4 not in our purview. We're limited to these nuclear
5 power plants. We do make sure that our licensees are
6 financially stable to operate and take that plant
7 through decommissioning.

8 BRIAN ANDERSON: Sir, I'm going to come to
9 you for the final question. I think that it's
10 important that we move on to the comment period.
11 Actually, sir, can I ask that since you were able to
12 ask a question earlier, can I go to this gentleman
13 please for a new question and I'd like to make that
14 the final question. I don't want to take away any
15 time from what's been allotted to provide comments.

16 RAYMOND SHADIS: I'll give my comment
17 [indiscernible].

18 BRIAN STERN: Thank you. The Draft EIS in
19 your presentation refers to the impact on aquatic
20 resources as Large when looking at winter flounder,
21 rainbow smelt and kelp -- and that's the impact from
22 the Seabrook Nuclear Power Plant -- the impact on
23 those species is Large. You then discuss the
24 cumulative effect, apparently, looking at the
25 influence on those species over time because of over-

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1 fishing or climate change or other stressors and say -
2 - based upon those cumulative impacts the effect from
3 Seabrook is Small. I've got a question -- that Large
4 -- and ask you to explain that better because it
5 sounds like since they're being killed anyway, we can
6 kill them ourselves first. It doesn't seem to make
7 sense to me. I was wondering if you could explain how
8 that analysis of cumulative impact works?

9 BRIAN ANDERSON: Sir, thank you for the
10 question. For the record, could we have your name
11 please?

12 BRIAN STERN: I am Brian Stern.

13 BRIAN ANDERSON: Thank you, Brian. Mike -
14 - could you address the impacts?

15 MICHAEL WENTZEL: I can. We did find that
16 the impact on winter flounder, rainbow smelt and some
17 kelp species was Large for aquatic resources because
18 of the impact of Seabrook Station's once-through
19 cooling system. We also found that for all other fish
20 species that we were able to make a determination on,
21 the impact was Small. That's based off of fairly
22 extensive monitoring data from the time of the plant's
23 initial licensing up and through recent times. So,
24 we're able to statistically see where there's an
25 impact that you can directly attribute to the

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1 operation of Seabrook Station. I won't get into the
2 details of that -- that's actually available in the
3 Draft SEIS.

4 As far as cumulative impacts go -- our
5 finding was for aquatic resources that -- the way it
6 works is you look at the direct impact of Seabrook
7 Station and then you look at all other impacts that
8 you can quantify. So, what we'd actually said was
9 that Seabrook Station's -- at least the cumulative
10 impact on aquatic resources was Moderate for most fish
11 species and Large for rainbow smelt and other species
12 that are affected by climate change. Seabrook
13 Station's direct contribution to that cumulative
14 impact was Small for most species and Large for
15 rainbow smelt, winter flounder and some kelp species.

16 BRIAN ANDERSON: Thank you, Mike. Yes,
17 ma'am. As a matter of timing for the meeting, we want
18 to ensure that there's enough time for everybody that
19 wants to speak to provide comments. I think it's very
20 important to move to that portion of the meeting.

21 If you're registered to speak -- we're
22 about to move to the portion that will allow you to
23 make comments and I think that it's very important
24 that we move to that phase of the meeting. That's the
25 important part of the NRC staff being here to solicit

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1 comments today. So, if you have not already
2 registered to speak, have not filled out a yellow card
3 -- could you please do that and I'll make sure that
4 you get the right time to speak.

5 LEE ROBERTS: We've got somebody here from
6 the Fukushima area. If you'll let her speak
7 [indiscernible]

8 MIE ATHEARN: I'm sorry, I didn't write --
9 Thank you so much. Thank you so much. My name is Mie
10 Athearn. I'm from Fukushima, Japan. I'm walking to
11 Boston. I here today as -- I was thinking just join.

12 But, I want to just let you know we didn't know --
13 earthquake. We didn't know -- tsunami. And then it
14 happen -- accident of Fukushima Daiichi Nuclear Power
15 Station. Then many Fukushima people now have to move.

16 We are losing our land. We have the evacuation.
17 Many people are suffering now -- radioactive exposure.

18 So, just let you know our truths. So, thank you so
19 much for giving me a chance to talk. Thank you.

20 Sir, may I -- so, I think it's a disaster
21 happen. So it's my opinion, but nuclear power station
22 I think why it exists in ours, I don't know why it
23 exists. It shouldn't. Must not exist only ours, so
24 please consider about this. I'd like to state about
25 that. Thank you so much. Thank you.

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1 BRIAN ANDERSON: Thank you very much for
2 those comments. I think we're all in agreement that
3 what happened in Japan is truly tragic and not just
4 the nuclear events, but the earthquake and tsunami and
5 the destruction that occurred there. So, I'm guessing
6 that I can speak for everybody in the room to say that
7 it's particularly moving to be reminded of what
8 happened there and I want to personally thank you for
9 sharing your personal story and providing those
10 comments here today. Thank you very much. And thanks
11 to all of you for those questions and comments.

12 I think it is important for us to move on
13 to the comment period. Like I mentioned earlier, to
14 ensure that everybody has an equal amount of time to
15 speak, I'd like to ask that everybody please try to be
16 concise and limit your comments to five-minutes. What
17 I'd like to do is call on people in sequence based on
18 the yellow cards that you've registered with. When I
19 call your name, if you could come up to the front
20 podium and use the microphone that I'm holding in my
21 hand to provide your comments. That I think will work
22 well to make sure that everybody has a chance to
23 speak.

24 I did notice during the first part of the
25 meeting that there were some people that came in after

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1 we had started -- some people might have come in
2 through the stairway -- so if there's anybody that is
3 here and wishes to speak and provide comments, but you
4 have not yet filled out a yellow card, please do that
5 so that we can have a record of who spoke and that I
6 can have a sequence of who's going to speak.

7 So, having said that, the first speaker
8 will be Don Tilbury, followed by Max Abramson and Jim
9 Cotter will speak after Max.

10 DON TILBURY: Do I come up to the --

11 BRIAN ANDERSON: Mr. Tilbury -- yes, sir.

12 DON TILBURY: First of all, I'm against
13 nuclear power. So, that's a bad start -- right? Then
14 I'll make comments on the local situation.

15 But just simply -- how many people here
16 like the power plant at Niagara Falls? How about the
17 one -- the tidal one -- up in Canada? Well, this is a
18 good way to understand that there are other ways to
19 make electricity -- and safer ways. So, with that
20 said, I'll just go on here --

21 I feel that nuclear came, has been tried
22 and now the problems outweigh the benefits. First of
23 all, I sold thickness gauges -- nuclear thickness
24 gauges -- in my sales work. And I thought -- Boy,
25 this is great. You get a little pellet that would fit

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1 into a drill and you'd be able to drill the rest of
2 your life with that one pellet. And then all the
3 other kind of possibilities -- that you could run some
4 of these things with a little nuclear pellet. Well,
5 it was okay for thickness gauges, but after hearing
6 all of the problems with it and so forth, I gave it
7 up. I didn't want to sell it anymore.

8 Okay -- now the issue that's already here.

9 The Seabrook Power Plant is here and whether I like
10 nuclear power -- that doesn't matter. Whether it
11 should continue to be licensed -- I am concerned about
12 that. I definitely feel that it is not. I just don't
13 understand -- my car that's sitting outside is 12-
14 years old -- it's got 150,000 miles on it. Should I
15 just figure it's going to go another 12-years? To me,
16 that's a simple comparison perhaps, but I feel that
17 with all the problems that have come up and all of the
18 things that you're trying to do to keep it going -- it
19 just doesn't make sense at all in my mind. Now, some
20 of the things about this -- when the Seabrook Plant
21 was built, the population density here was a lot less.

22 It's probably three times that it was 20-years ago.
23 So, does the density enter into your equation now --
24 as you work out this next 20-years? I should think it
25 would.

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1 If it brings up evacuation, in the case of
2 a problem at the plant, both local residents and beach
3 population -- and if you go down to the beach on the
4 weekend and try to think -- what would happen if there
5 was some kind of nuclear problem? No way -- there
6 would be 100,000 people that would die.

7 And how much electricity is generated --
8 and here's another one of my questions. How much of
9 the electricity is generated here, stays here and how
10 much goes on to the grid? Now, the reason for asking
11 that is that it seems that the locals are at risk to
12 provide electricity to those elsewhere. Now, can I
13 get an answer on that? What percentage of the
14 electricity stays here and what percentage goes on the
15 grid? Well, that's it. That's how I feel. And I do
16 have a little drawing here that shows -- *Making*
17 *Decisions*. One of them is the nuclear and all these
18 others are various ways to make electricity -- wind,
19 solar, geothermal, tidal, ocean, waste-to-energy --
20 and that's what we should be looking at. I feel that
21 nuclear has come and should be gone. Let's get on
22 with the other sources.

23 BRIAN ANDERSON: Thank you, Don, for those
24 comments. Max Abramson is the next speaker, followed
25 by Jim Cotter and Thomas Popik.

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1 MAX ABRAMSON: I already gave my comment.
2 I'm sorry, I thought that was the question period.

3 BRIAN ANDERSON: So, for the record --
4 during the question-and-answer period, Max spoke the
5 comments that he intended to provide here. Since we
6 already have that on the record, we'll take his
7 written comments and move on to the next speaker.

8 DON TILBURY: How much of the electricity
9 stays here and how much goes to the grid?

10 BRIAN ANDERSON: Sir, for the comment
11 period -- NRC staff doesn't have all of the technical
12 experts here that would be able to answer all of the
13 questions. So, for the comments, we're going to take
14 all the comments -- all comments that are received
15 here today and after this meeting are going to receive
16 a written response.

17 Jim Cotter is the next speaker.

18 JIM COTTER: My name is Jim Cotter. I'm
19 from Wakefield, Massachusetts. I have a consulting
20 company -- energy consulting company. We're looking
21 at oversights with respect to spent fuel rod pools.
22 One of the documents we're using is (51) rulemaking
23 petitions with respect to spent fuel rod pools that I
24 think was put together by the Foundation for Resilient
25 Scientists. I'm a managing partner in the

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1 consultancy.

2 My background -- I studied nuclear physics
3 at Northeastern University; nuclear chemistry and
4 geology at Boston College; I was a nuclear weapons
5 crew chief during the Vietnam War; I'm the seismic
6 technician, 1968-69; I worked on Seabrook, Vernon,
7 Wiscasset, Pilgrim, Millstone, Nine-Mile, North Anna -
8 - where they just had the 5.8 earthquake; I did the
9 bore-hole studies for the reactor siting at Seabrook;
10 I went on to go for a doctorate in geo-physics at
11 Umass/Amherst, changed my mind and did a BA/MBA
12 Finance.

13 My concerns -- we're facing a potential
14 6.0 earthquake within our lifetimes. In the last
15 1000-years -- in 1050 we had a 7.2 estimated in the
16 St. Lawrence River Valley; 1638, estimated 6.8 between
17 Manchester and Concord; 1725, 1727, 5.6 plus for
18 Portsmouth; 1755, 6.4 estimated off Cape Ann. There
19 was a periodicity of approximately 250-years -- so
20 that's why they say the 6.0 is coming.

21 One of the concerns with respect to spent
22 fuel rods -- inadequate offsite power generation. In
23 the event of an extended loss of power for the
24 electrical grid, collapse in excess of seven-days --
25 which is one of the scenarios of the power generation

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1 from diesel. Will the pool withstand a 6.0
2 earthquake?

3 Issues of corrosive piping at various
4 nuclear power plants -- including leaking tritium in
5 the Vernon, Vermont plant. How many other power
6 plants are leaking tritium? It's probably estimated
7 at 20 or more.

8 Petition for rulemaking -- I mentioned.
9 We are working on five-petitions for rulemaking to
10 address what we see as serious oversights -- or lack.

11 One may have been addressed is weather. Weather
12 moves west to east. Has anyone considered a
13 nor'easter storm with the spent fuel rod pool?

14 Fukushima -- I'll address that. It's what
15 is called a black swan event. It could not be
16 predicted -- approximately every 10,000 years. We
17 have a potential black swan here that's been
18 overlooked. One is a 6.0 in coincidence with a
19 volcano in the Canary Islands splitting up the middle.

20 In the last 50,000 years, it's put three escarpments
21 into the ocean creating a 100 to 150 foot tsunami
22 wave. There's documentation of sediments in Scotland
23 about 250-years ago of at least a 25-meter wave.

24 That's just my comments.

25 BRIAN ANDERSON: Jim -- thank you for

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1 those comments.

2 JIM COTTER: One more. I was stationed at
3 Misawa Air Force Base, about 150-miles north of
4 Fukushima in 1965 in the Air Force -- and we had at
5 least 10-20 earthquakes a day. The whole place just
6 shook.

7 BRIAN ANDERSON: Thank you, sir, for those
8 comments. The next speaker will be Thomas Popik
9 followed by Debbie Grinnell.

10 Before Mr. Popik speaks, I wanted to take
11 the time to recognize two members of Senator Ayotte's
12 staff that are here today -- Simon Thomson and Mike
13 Scala -- in the back row. I wanted to make everybody
14 aware that they're here today. Thank you gentlemen
15 for joining us.

16 THOMAS POPIK: Hello. My name is Thomas
17 Popik. I'm with the Foundation for Resilient
18 Societies. I come here today with the concern of
19 long-term loss of outside power to nuclear power
20 plants. Many of you already know that nuclear power
21 plants -- almost all of them -- require connection to
22 a functioning electric grid to maintain operations.
23 If they lose that connection, there are backup diesel
24 generators, but they only have a seven-day -- in most
25 cases -- supply of fuel on site.

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1 For many of us, this is a major concern
2 should we experience a power outage in excess of
3 seven-days accompanied by difficulties in re-supplying
4 diesel fuel. So, these type of issues have been
5 examined at very high levels and I'm here today to
6 read some excerpts from a letter written by Dr. Bill
7 Graham, who was Chairman of the Electromagnetic Pulse
8 Commission -- that's a Congressionally charged
9 Commission -- as well as, previously, science adviser
10 to the President. So, I'm going to read some of this
11 letter, which was addressed to the Chairman of the NRC
12 --

13 Dear Chairman Jaczko, I am writing you as
14 the Chairman of the Congressionally mandated
15 Commission to assess the threat to the United States
16 from electromagnetic pulse attack, as well as the
17 former science adviser to the President and director
18 to the Office of Science and Technology Policy in the
19 Executive Office of the President from 1986 to 1989.
20 This letter is to urge you as you form plans to
21 protect nuclear reactors from Fukushima-type disasters
22 where electric power to support nuclear plant
23 operations is lost for a protracted period to take
24 account of the very real threats from a great
25 geomagnetic storm and from a nuclear EMP attack.

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1 An EMP can be generated naturally by a
2 solar flare or coronal mass ejection from the sun,
3 which can produce a great geomagnetic storm on the
4 earth, similar to some aspects of an EMP attack from a
5 high-yield nuclear weapon with similar catastrophic
6 consequences. A great geomagnetic storm can cause
7 collapse of the electric grid and other critical
8 infrastructures -- transportation, communications,
9 banking and finance, food and water -- for a
10 protracted period of months or years.

11 Now, this is an important part here --

12 A study by the National Academy of
13 Sciences independently confirmed the EMP Commission's
14 assessment that if a great geomagnetic storm like the
15 1859 Carrington event recurred today, recovery of the
16 national electric power grid could take four to ten-
17 years. Such an event could also cause operators of
18 the (108) nuclear plants in the United States to lose
19 the ability to perform a safe controlled shutdown of
20 their power reactors producing a Fukushima-like
21 disaster on a large-scale. Although great geomagnetic
22 storms are rare, estimated to occur about once a
23 century, most experts assess that we are probably
24 overdue.

25 Now, this isn't some fringe group that's

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1 coming up with a speculative scenario. These kind of
2 events have already occurred in recorded history.
3 There was another great geomagnetic storm in 1921.
4 This is a former science adviser. This letter is
5 copied to the current science adviser to the current
6 President, who also has written an extensive editorial
7 in the *New York Times* warning of this kind of
8 potential event.

9 Now, I'm speaking mostly to the NRC staff
10 here today. I urge you -- go back to your offices and
11 please talk about this. This is not speculative.
12 This is a real danger. When the probability of these
13 kind of events is not included in Environmental Impact
14 Statements, it affects the credibility of the NRC and
15 it puts all of us at risk. These kind of events can
16 be protected against, but not if we don't address them
17 in the regulatory process. Thank you.

18 BRIAN ANDERSON: Thomas -- thank you for
19 those comments. The next speaker is Debbie Grinnell
20 followed by Brian Stern and then Marcia Bowen.

21 DEBBIE GRINNELL: I'm Debbie Grinnell. I
22 live in West Newbury, Massachusetts within the 10-mile
23 EPC of Seabrook. I work for the C-10 Foundation. We
24 do the real-time radiation monitoring for the state of
25 Massachusetts. And I'm a founding Board member.

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1 The C-10 Foundation requests the NRC
2 suspend any decision on Seabrook Station's relicensing
3 until:

4 The NRC required Supplement 4 to GL-88-
5 20/*Individual Plant Examination of External Events for*
6 *Severe Accident Vulnerabilities* is completed and
7 submitted by NextEra and approved by the NRC.

8 Secondly -- the NRC's license renewal
9 process completes a formal review of Seabrook's design
10 and licensing basis against current NRC requirements
11 and guidance. This has not been done yet.

12 Thirdly -- all NRC required seismic
13 upgrades for Seabrook Station are completed and those
14 reports made public.

15 Four -- in-depth engineering analysis to
16 determine the extent and structural weakness imposed
17 by Seabrook Station's ASR concrete degradation is
18 completed and all reports are made public. Seabrook's
19 ASR concrete degradation has been characterized as
20 Moderate and Severe in NRC inspection reports. The
21 extent of the structural damage and its impact to the
22 structural integrity of four safety related building
23 foundations is currently unknown. Seabrook's seismic
24 vulnerability cannot be determined until the
25 structural weakness imposed by the ASR concrete

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1 degradation of these safety related foundations and
2 other plant areas susceptible to ASR degradation is
3 determined and integrated into Seabrook's updated
4 Seismic Risk Analysis.

5 Due to the unknown degree of structural
6 weakness imposed by the concrete, NextEra cannot
7 provide reasonable assurance that they are operating
8 within their current license. Therefore, the NRC must
9 suspend NextEra's application for a license extension
10 until: both in-depth assessments are completed;
11 upgrades are done; and the structural integrity of all
12 buildings is determined and assured for 40-years.

13 The NRC must aggressively undertake staff
14 requests for additional information concerning the
15 Severe Accident Mitigation Alternatives review of
16 Seabrook Station.

17 So, I would like to know when all of that
18 is completed and there's resolution to the seismic
19 risk -- Seabrook's vulnerability -- and the concrete -
20 - the extent of the concrete issue. That I know we
21 have a suspension at the moment, but somehow the
22 Safety suspension does not seem to stop the process of
23 this Environmental Impact. It seems to be considered
24 a separate issue. They're integrated.

25 After the tragic events at Fukushima in

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1 Japan and the recent earthquake in Virginia -- on
2 September 1, 2011, the NRC has requested operators of
3 all (104) commercial reactors to conduct new
4 assessments of their facility's vulnerability to
5 earthquake damage. Plants have been given up to two-
6 years to complete these assessments. Until these
7 assessments are done, individual plant risk will be
8 unknown and the NRC will not know what upgrades to
9 require. According to the U.S. geological survey
10 maps, Seabrook's seismic risk level is described as
11 Moderate.

12 Unfortunately, the NRC's application to
13 renew the license of an existing reactor does not
14 entail a formal review of the reactor's design and
15 licensing basis against current NRC requirements and
16 guidance. Therefore, shortcomings are not identified
17 that would have required upgrades. However, now --
18 post-Fukushima and the earthquake in Virginia -- the
19 NRC Task Force has recommended upgrading seismic and
20 flooding design basis for every nuclear plant in this
21 country. But here's the sad history of the NRC
22 concerning this issue -- as early as 1996, the NRC
23 established new seismic regulations for new site
24 application, but these regulations were not applied to
25 existing sites.

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1 Since 1996, the NRC has also established
2 interim staff guidance, but only for the new reactor
3 reviews. In 2005, the NRC requested applications for
4 new reactors -- often proposed for the same sites as
5 existing reactors -- include earthquake risk
6 assessments that were worse than previously understood
7 in several cases and suggested some existing plants
8 could be in jeopardy -- that was 2005. In 2007, the
9 NRC staff established interim guidance in three areas
10 related to seismic issues: high frequency ground
11 motion; winter precipitation loads on the roof of
12 structures; and seismic margin analysis based on
13 probabilistic risk assessment. Again, these pertained
14 only to new sites.

15 For nearly a decade, the NRC has known
16 that the seismic risk to nuclear plants in the eastern
17 two-thirds of the U.S. was greater and existing plants
18 had outdated protection against seismic and flooding
19 hazards, but took no action.

20 It is our understanding that the NRC
21 establishes renewal regulations based on its
22 determination that existing regulatory processes are
23 adequate to ensure that the licensing basis of
24 currently operating U.S. nuclear power plants provides
25 and maintains an adequate level of safety. Renewal of

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1 Seabrook's license must be suspended as the NRC has
2 known the seismic risks were greater for existing
3 plants for a decade. Valuable time has been lost as
4 the NRC has known for years that existing regulatory
5 processes were inadequate to assure an adequate level
6 of safety and has taken no action.

7 That ends my comment.

8 BRIAN ANDERSON: Thank you for those
9 comments, Debbie. The next speaker will be Brian
10 Stern followed by Marcia Bowen and then Steven
11 Athearn.

12 BRIAN STERN: My name is Brian Stern. In
13 your introductory remarks, you state that the public
14 comment is very important. I believe that it is and I
15 appreciate it, but I also think that the process is
16 flawed for the lack of public comment on the safety
17 portion. I understand that this meeting is limited to
18 the environmental issues and that the Safety
19 Evaluation Plan is not going to be subjected to this
20 type of local hearing.

21 I think that the process is also flawed in
22 that the topic is mired in technological issues and
23 regulatory issues that are beyond the public's
24 abilities to address. If we were dealing with a
25 hazardous waste site -- which of course are of great

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1 environmental concern, but may pale compared to
2 radiological issues -- the public could receive a
3 technical assistance grant to be able to hire
4 technical assistance to help them through the
5 technological issues. In the nuclear field, there is
6 -- in the NRC issues -- there is no similar TAG grant
7 available, so you're relying upon the good graces of
8 people to wade through hundreds of pages of technical
9 documents to try to participate in this process. I've
10 done my best, but I think it's a difficult process and
11 I think it's flawed in those regards.

12 In reading through the documents, I have
13 come across the phrase used by the NRC of 'unavoidable
14 adverse impacts'. I'm shocked to hear that. This
15 phrase is used in terms of "emissions and release of
16 chemical and radiological constituents from the
17 plant". There are chemical and radiological
18 constituents released from the plant. That's
19 acknowledged. That's 100% true. There's no question
20 about it. And they are termed to be unavoidable
21 adverse impacts. They're accepted. That's what comes
22 along with it -- comes along with the plant. That
23 turns the entire issue on its head. The matter is a
24 question of licensing. That does not make it
25 unavoidable. It's completely avoidable. How can you

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1 take the issue as to whether or not it's safe and say
2 -- Well, these just come along with the plants, so
3 it's unavoidable. The issue is -- it should not be
4 licensed if these are avoidable adverse impacts, which
5 they are. The alternative is to not extend the
6 license.

7 We can look at these adverse impacts in a
8 number of areas. In the groundwater, there is an
9 acknowledged tritium leak. There is tritium in the
10 groundwater. The EIS states that in order to control
11 the tritium in the groundwater, there is water being
12 pumped from the ground to the rate of 32,000 gallons a
13 day for tritium plume control. That water, of course,
14 would have an effect on the local groundwater and
15 there is nothing in the report that I saw -- but
16 again, I'm skimming through hundreds of pages -- that
17 addresses the effect on local groundwater supplies.
18 Nor does it predict the effect on local groundwater
19 supplies as we go out 40-years.

20 Water becomes one of the key limited
21 resources we're going to face in the future. That's
22 pretty accepted wisdom. Water is gold and it will be
23 gold in the future and 32,000 gallons a day now -- the
24 plant was not designed to leak tritium. What are the
25 predictions for an increase in the rate of tritium

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1 being leaked? The plant has already been increased in
2 its Megawatts thermal and net electrical capacity -- I
3 think by about 12%. And what is the increase going to
4 potentially be in the future or not? The plant is
5 running hotter than it was initially licensed for.
6 What is the corroding material or something that's
7 happening for the tritium release and these are not
8 going to be linear degradations in plants.

9 So, I've not seen in the report the
10 projection of what the tritium release will be in the
11 future. What the rate of groundwater pumping will be
12 in the future. How long will that groundwater need to
13 be pumped after decommissioning? So, I think there's
14 a big failure in the report in that regard.

15 The groundwater -- 32,000 gallons a day --
16 that's being pumped from the plant is being put into
17 the water discharged out to the ocean. I was shocked
18 to hear that. I don't think most of the public knows
19 that. Nor do I think that the fishermen or
20 recreational people know that either. We have an
21 enormous aquatic resource here that also does not stay
22 local. Fish, shellfish -- whatever it may be -- move
23 and water moves. There's dilution, but I did not see
24 in the report what's being done to warn the public of
25 the discharge of tritium in that area and

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1 concentrations.

2 I've not seen anything that assesses a
3 bioaccumulation or long-term effect of tritium. I've
4 not seen anything in the report talking about warning
5 people -- warning fishermen. I have not seen anything
6 where the fishermen that concentrate in that area --
7 or lobster traps in that area -- to test what's caught
8 in that area or to test that the health of people that
9 are regularly consuming resources from that area of
10 the discharge of the pipe. So, I think that there are
11 flaws or gaps or omissions in the Draft SEIS with
12 regards to the tritium and the groundwater leak.

13 BRIAN ANDERSON: Brian, I'll ask that you
14 take just one more minute to finish up your comments.

15 BRIAN STERN: I would ask for more time to
16 speak. I'm trying to be concise. Each of my topics
17 have a number of -- I'd like to move on now to air
18 quality.

19 BRIAN ANDERSON: Brian, there are a lot of
20 other people that have signed up to speak. I want to
21 make sure that everybody has equal time. At the end,
22 if you're not able to finish in the next minute, I'm
23 happy to let you finish if there's more time left in
24 the meeting.

25 BRIAN STERN: If you prefer that I will --

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1 you're asking me to limit my remarks to another minute
2 -- I'll do so, but I'll ask then a chance to speak
3 again at the end and have an opportunity to say my
4 remarks.

5 BRIAN ANDERSON: That's fine, thank you.

6 BRIAN STERN: With regard to air quality -
7 - again, they're treated as unavoidable adverse
8 impacts. There is a radiological environmental
9 monitoring plan that I think is not adequate or if it
10 is adequate it does not meet its objectives. The air
11 quality is determined to be within limits based upon
12 limited monitoring on-site and the off-site monitoring
13 is not with regards to radiological components. I do
14 not think that the air quality is adequately tested.
15 I think that it is a very reasonable cost to have
16 real-time monitoring in a number of areas within New
17 Hampshire. I know that the C-10 group is doing it out
18 of their own budget. You would assume that NextEra
19 could handle it in their budget and that the NRC would
20 require it as part of the Radiological Environmental
21 Monitoring Program that's imposed on the licensee.

22 Without that data, I don't see how the
23 Draft SEIS can pass off on the air quality as not
24 impacted, when the data is not collected sufficiently.

25 And then to the extent that it is collected and they

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1 do find radiological releases in the air, they're
2 called unavoidable adverse impacts.

3 I'd like to just finish before I turn the
4 mic over -- if I'm going to go over a minute -- to
5 just finish on the air quality issue, then I can pick
6 it up later on other issues.

7 I understand that radiological releases
8 into the air are considered acceptable based upon the
9 nature of the gases that are emitted, but I also
10 understand that those gases then further breakdown to
11 Strontium and Cesium. I did not see in the Draft SEIS
12 any discussion of that fact and the acknowledgment or
13 evaluation of the air releases -- what they break down
14 into further components and if that's done, I think it
15 will find that the components that they further
16 breakdown into -- the Strontium and Cesium -- have
17 higher health risks than are acknowledged in the
18 report.

19 And I would like an opportunity after this
20 to continue, since I'm being stopped at this point.

21 BRIAN ANDERSON: Brian, thank you for
22 those comments. Just as a reminder to everybody --
23 this meeting is not the only avenue to provide
24 comments. NRC staff will certainly take spoken
25 comments at this meeting and a session again tonight,

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1 but today is not your only chance and this meeting is
2 not your only chance. As the staff discussed earlier,
3 there are ways to provide written comments
4 electronically or by conventional mail.

5 So, if there's more to say than you're
6 able to get in during the comment period of these
7 meetings, NRC staff will continue to take comments
8 outside of this meeting and for other times.

9 The next speaker is Marcia Bowen --

10 MARCIA BOWEN: I'm Marcia Bowen and I
11 [indiscernible] --

12 BRIAN ANDERSON: Okay. Thank you, Marcia.

13 The next speaker is Steven Athearn -- am I saying
14 that right?

15 STEVEN ATHEARN: You're saying it
16 correctly.

17 BRIAN ANDERSON: And Mary Ross will be
18 after Steven.

19 STEVEN ATHEARN: Hi. I'm, as I mentioned
20 earlier, walking to Boston to the Japanese consulate
21 with my wife who's from Fukushima. She spoke earlier
22 at the end. She would like to share with you what her
23 immediate family and her nephews and nieces, who are
24 young people, are going through. They're living with
25 concern that they're breathing everyday and eating and

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1 drinking radioactive isotopes to be incorporated into
2 their bodies. I know that you understand the issue
3 between internal/external exposure, but I think that
4 the internal exposure has not been -- as I understand
5 it -- focused on in the general models of radiation
6 exposure and public health.

7 Doing this walk -- I'm just so busy
8 organizing it, I haven't had a lot of time to read --
9 but there's one aspect that I think I am fairly
10 knowledgeable about and that is the energy situation
11 in general, which I studied for about three or four
12 hours a day for about four-years up until about two-
13 years ago. Somebody said that this is outside the
14 scope and I'm not sure if that's because it's
15 considered a Safety issue, but the general finite
16 nature of the energy resources that we depend upon
17 cannot be outside the scope of the safety of nuclear
18 power plants. This may not be an issue of the impact
19 of a plant on the environment, but of the impact of
20 the environment on the plant. Which is in the same
21 category as the natural disasters that can happen.

22 But, if you look at the Middle East, for
23 example, which is supposed to contain 60% of the
24 world's oil -- I think it's more like 45% if you drop
25 that by at least 300-million barrels as the highest

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1 Saudi expert on their production says that we should
2 reduce that -- he's talking about the OPEC-5 because
3 he doesn't want to -- he tends to avoid talking about
4 Saudi Arabia specifically. But, there were some
5 WikiLeaks documents that recently surfaced describing
6 what he had told U.S. intelligence and it was said
7 that no U.S. official had commented on this. That
8 isn't true. George Bush -- when he visited Saudi
9 Arabia in January 2008 -- said that basically we
10 really can't ask them to raise their production
11 because they're already producing as much as they can.

12 Don Evans said the same thing in 2006. That was not
13 the thing that remained, after he went to Saudi
14 Arabia, in the media -- it doesn't matter what part of
15 the spectrum you were on, you didn't hear that part
16 unless you were concerned specifically about energy.

17 But these resources are finite. The oil
18 resource is going into decline now. We're evidently
19 at a bumpy plateau, but we could expect -- the only
20 thing we can expect rationally, if the Middle East can
21 no longer raise its production, is that the world is
22 at peak oil. And world production will be declining
23 just as the production of many countries already has,
24 such as the United States, which began in 1970. The
25 rate at which the world production declines is not the

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1 rate at which our ability to import oil will decline.

2 That will decrease faster because countries that are
3 able to export tend to meet their own needs first and
4 those are growing, especially when oil is expensive
5 and the wealth of those countries is going up. But if
6 you look at the other resources -- the situation is
7 not so great either.

8 Natural gas recently was viewed as going
9 into decline. In fact, conventional natural gas
10 production has peaked in 1973. We surprisingly
11 discovered shale gas and we've had the shale gas
12 revolution and all of a sudden there's no problem in
13 sight. It's just that our shortsightedness in energy,
14 which you're probably familiar with.

15 But in the case of coal, which supplies
16 most of our electric generation -- it takes (3) mile-
17 and-a-half long train cars every day to supply Plant
18 Scherer in Georgia and that's sub-bituminous coal.
19 We're already in decline of the good coal -- the coal
20 that has high energy density. The gentleman over here
21 talked about the loss of external power -- we've got
22 to consider the situation when we think about that
23 issue and we've got to consider the impact on the
24 economy. Almost all of us are -- we've lived in a
25 situation where all of these things are growing.

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1 I looked at one of these oil production
2 curves -- of course, the future is a little bit
3 uncertain, but in general terms it's pretty clear.
4 But, I realized that I was born in 1966 and if I live
5 another 10 or 15-years -- more than half of the total
6 oil resource that will ever be consumed -- ever --
7 will have been consumed in my lifetime. That's the
8 lifetime of one individual, which shows how short --
9 we think of 20 or 30-years as a long time just because
10 we're people, but the situation is -- it's very --
11 it's incredibly short. If you look at it over a scale
12 of 1000-years, it would just be a spike that went
13 straight up and straight down and that's it.

14 And our financial system is geared towards
15 growth -- we need to have growth in order to prevent
16 collapse. But if our society collapses, we cannot
17 guarantee the safety of nuclear reactors. We tend to
18 think only in terms of our needs -- what we need. We
19 project that we need this much energy or this much
20 electricity, but if we want to be the least bit
21 realistic, we've got to think about what we can
22 actually expect to happen.

23 So, I would urge you to -- it absolutely
24 cannot be outside the scope. Maybe it's outside of
25 the scope of a narrowly defined environmental effect,

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1 but in terms of the safety of operating nuclear power
2 plants after 2030 -- if oil declines at 5% a year,
3 it's going to be half in 14-years, which is before
4 2030. We could be in a very different society by that
5 time. We might even be in a collapsed society. To
6 not discuss this risk -- this is not something that's
7 going to happen once in a thousand years. This is
8 going to happen.

9 Oh, by the way, uranium is also finite and
10 nuclear plants are using -- the uranium mines are
11 supplying only 78% of the need of nuclear plants
12 worldwide. That's up from about 50% since Kazakhstan
13 came online. But uranium supply is also finite.

14 BRIAN ANDERSON: Steven, I'll ask that you
15 finish up your comment.

16 STEVEN ATHEARN: I'll wrap it up. Okay.

17 BRIAN ANDERSON: Thank you.

18 STEVEN ATHEARN: So, we need to look at
19 the contingencies for what can happen to our society
20 when energy declines. That is a real risk and it does
21 impact -- it has obvious implications for our ability
22 to run nuclear power plants for sure -- the most
23 complex thing around.

24 I think wind has its clear limitations. I
25 think offshore wind in the Gulf of Maine does have

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1 some hopeful possibilities. But if that program
2 fails, you don't get the same consequences as you do
3 if a nuclear power plant explodes. So, thank you very
4 much.

5 BRIAN ANDERSON: Steven, thank you for
6 those comments. The next speaker is Mary Ross and
7 after Mary, William Harris will speak.

8 MARY ROSS: Thank you. I will be very
9 brief. I have some questions. How can NextEra
10 justify the Seabrook Station 10-mile Emergency
11 Planning Zone or the 50-mile ingestion pathway when we
12 know how widespread contamination can and would be
13 given an accidental release of radioactivity?

14 We know that weapons testing in Nevada
15 contaminated our entire country. We know that we have
16 received and continue to receive fallout from
17 Fukushima. How can NextEra say that protective
18 measures are adequate for the immediate and greater
19 communities? How can they justify the continued
20 operation of an aging plant that has met its design
21 age limit?

22 BRIAN ANDERSON: Mary -- thank you for
23 those questions and comments. William --

24 WILLIAM HARRIS: Good afternoon. My name
25 is William R. Harris. I'm speaking today as an

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1 individual. I live within the 10-mile evacuation zone
2 in Newburyport, Massachusetts. But I expect to do
3 joint comments together with Thomas Popik for the
4 Foundation for Resilient Societies before your October
5 26th deadline.

6 What Tom Popik covered in his remarks were
7 the general problems from geomagnetic storms, which
8 are natural occurring events involving the weather of
9 the sun. So, it's not exempted from your duty to
10 consider under your enemy-of-the-state doctrine, which
11 is probably obsolete -- that's a 1967 doctrine that
12 the NRC applies. It turns out the same mitigation
13 measures for the natural occurring solar weather will
14 protect against nuclear explosions -- man-made nuclear
15 explosions, which the press suggests could be in the
16 offing if we have additional proliferation to Iran,
17 etc.

18 So, I'm just going to summarize briefly a
19 table I prepared -- a two-page table. But, before I
20 go issue by issue, I'd like to point out that although
21 there's a generic rulemaking that Mr. Popik presented
22 on March 14th -- I commented -- its docket 50-96 --
23 because of his very careful PRA Level 3 analysis, we
24 actually have a site-specific analysis of the risks
25 from geomagnetic storms -- plant by plant -- for all

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1 (104) nuclear plants. (35) of those plants have
2 higher risks than Seabrook, but I believe it is a
3 fundamental flaw of the Draft Supplemental
4 Environmental Impact Statement to not do the site-
5 specific analysis of this risk for Seabrook because we
6 have modeling that shows effects that are special and
7 site-specific for Seabrook that increase the risks and
8 therefore changed the cost-benefit analysis for SAMA
9 analysis -- whether you have a cost effective remedy.

10 In particular, Seabrook is pretty far
11 north -- latitude matters. If you're near the North
12 Pole -- you have higher risks of geomagnetic storms
13 with high surges -- what are called E-3 surges. If
14 you're near the South Pole you have that. We've had
15 major outages in South Africa in 2003. In addition to
16 latitude, we have three other specific effects because
17 of Seabrook being where it is and the transmission
18 grid being the way it is. In particular, we have an
19 east/west transmission grid -- one of the 345kV lines
20 is east/west. It turns out that magnifies the effects
21 of solar storms.

22 We have a second effect -- that Seabrook
23 is at the end of the line. When the line ends, you
24 get a bigger surge.

25 Third effect -- we have the ocean right

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1 next to Seabrook. The modeling that was done at Oak
2 Ridge National Laboratory and that Tom Popik has done
3 shows that's another important effect.

4 Then we also have the effect of the rock
5 that transmits current below the surface of the
6 ground. We have the granite of New Hampshire also
7 compounds and exasperates these effects. So we have
8 site-specific impacts. They have not been analyzed in
9 this draft SEIS. They are significant.

10 I believe -- and Mr. Popik's analysis
11 shows in a PRA Model 3 analysis where there could be
12 roughly an expected loss of 2000 people -- that we
13 have the highest risk for the Seabrook plant, which is
14 an above-average risk compared to the average of the
15 (104) plants, from the effects of geomagnetic storms.

16 The risk is two orders of magnitude greater than any
17 other risk analyzed in this Draft Supplemental EIS.
18 So to leave out the overwhelmingly largest risk would
19 be irresponsible.

20 In addition, it appears that almost all
21 these risks can be mitigated at very low-cost by cost
22 effective mitigation measures. If you don't analyze
23 those measures you will not mitigate those measures.
24 Then we will have the needless kind of common fault
25 failure that the Miller Task Force has told us all the

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1 NRC's trying to avoid in the future.

2 So, it's not a tsunami that causes a loss
3 of backup power. It would be a solar storm that takes
4 out much of the grid -- the large transformers
5 especially vulnerable -- and then you have the loss of
6 diesel power on-site because you're not sheltering the
7 diesel engines -- the pumps. If you go to off-site
8 gas stations -- those pumps may be out. But at
9 relatively low cost these can be sheltered.

10 So, let me run through briefly the (9)
11 issues that I propose and will comment on detail. So
12 the first is to provide on-site backup power that's
13 designed to cope with electromagnetic events. Mr.
14 Popik suggests an organic Rankine cycle engine. It
15 could use the waste heat from the power plants. You
16 can get 4kW for \$80,000. This is cheap in terms of --
17 the benefit cost analysis shows it's a benefit of
18 (110) -- if you take the NRC's value for loss of life
19 -- that's extraordinary.

20 So, if you don't take the Oak Ridge
21 National Lab estimate, which is new and significant
22 information you should consider from 2010, which is a
23 1% chance per year -- the expected large magnitude
24 event every 100-years, let's say it's every 200-years
25 -- and don't take Tom Popik's modeling, which is a 50%

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1 likelihood of restoration of power after loss of
2 outside power. If it's 90%, you still have a positive
3 return of (11). These are mitigation measures that
4 really need to be done.

5 I'd like also to say that Mr. Popik -- the
6 Oak Ridge analysis was criticized in a July 20 filing
7 by the Nuclear Energy Institute -- a trade institute -
8 - they said that Mr. Popik didn't really understand
9 what they did. But they utilized two national experts
10 on electromagnetic pulse -- a Mr. Kappenman of
11 Minnesota and a William Rudasky of California, who are
12 national experts on these issues. He had them review
13 his modeling as well. So, it's inexcusable not to
14 consider this significant risk that is magnified at
15 the Seabrook site. Second, there's a possibility --

16 BRIAN ANDERSON: Excuse me, William -- I'm
17 sorry to interrupt. If you could wrap up in the next
18 minute. I'll allow you the same --

19 WILLIAM HARRIS: Okay.

20 BRIAN ANDERSON: -- if there's time at the
21 end of the meeting.

22 WILLIAM HARRIS: There are other backup
23 measures -- basically backup batteries. If you have
24 battery chargers it's important to shelter them. The
25 switches are vulnerable. These are very low-cost

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1 measures. So, I've identified the measures and some
2 references to what can be done.

3 To summarize the site-specific risk for
4 Seabrook with Mr. Popik's analysis -- the risk for the
5 next 19-years of licensure of long-term loss of
6 outside power -- 2011 to 2030 -- is 17.4%; the
7 probability of water boil-off -- 8.7% for the spent
8 fuel pool; probability of zirconium fire -- 4.3%.
9 When you extend the license 20-years, you end up with
10 roughly a 1 in 12 chance of a zirconium fire at
11 Seabrook. And this is avoidable at very low cost by
12 just the appropriate backup power -- some of which is
13 recommended in the Miller report.

14 So, it's very important that you include
15 this significant risk because it's site-specific and
16 it's new information and there're low-cost measures to
17 remediate it. Thank you.

18 BRIAN ANDERSON: Thank you for those
19 comments. The next speaker is Raymond Shadis. After
20 Raymond will be -- I believe it's Connie Wilkins and
21 Doug Bogen after that.

22 RAYMOND SHADIS: I just have a few brief
23 comments and they largely have to do with process and
24 approach. First -- taking off from what Mr. Paul
25 Gunter said about the schedule -- investigation of the

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1 lessons learned from Fukushima and so on and how they
2 might apply in license renewal. I'd like to comment
3 on one aspect of that asymmetrical approach where the
4 process goes forward at a set pace, but the
5 investigation on safety related and environmentally
6 related issues -- it doesn't keep pace with the
7 process.

8 That is the effect that -- if you go ahead
9 at a careful methodical pace to investigate the
10 Fukushima issues and I really think that's
11 appropriate, then your findings -- your insights --
12 will not be available until after the proceeding is
13 closed. I've heard it from NRC on the national level
14 and also at our local annual site assessment meetings
15 that -- We're studying this and we're going to put
16 into effect whatever measures are necessary to address
17 the lessons learned from Fukushima. Well, all well
18 and good, except for its effect on the hearing rights
19 of the citizens and the states.

20 Well, if the opportunity for a hearing has
21 expired and the hearing itself is completed -- You can
22 always bring your concerns to us via the 2.206 process
23 or if it's a regulation that is at issue -- the 2.802
24 where you can do a rulemaking, whatever. The problem
25 with the 2.206 process is that there are no standards

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1 for judgment or decision. The director's decision can
2 be arbitrary and capricious. It is not reviewable.
3 You cannot appeal a 2.206 decision. You have no
4 rights of discovery. You have really no right to
5 rebut. You cannot examine witnesses. There are none
6 of the trappings of a real adjudicatory process.

7 So, what you're doing -- if you delay
8 decisions that would affect the material issues in a
9 hearing until after the hearing is over -- is you take
10 away those hearing rights. And in effect, I guess the
11 solution would be to grant the petitions that have
12 been filed to say -- Please suspend the hearing
13 process until these considerations are processed --
14 the Fukushima lessons learned.

15 Or offer a second opportunity for hearing
16 after those things are registered. I'm hoping that
17 I'm communicating the asymmetry here. You really are
18 running two different time schedules.

19 The second part of my comments is
20 specifically on the nature of the environmental study
21 that you provided. And again the topic is time --
22 time and trending. I'm going to take an example out
23 of the study. It would be section 8.4, which has to
24 do with Alternatives. Within that section there're --
25 all the considerations of alternatives are

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1 contemporary to 2010. That's the last date of any
2 number that's put in there. For example, in 2010
3 there were 35,000 Megawatts of wind capacity. Of
4 which, I've personal knowledge about -- 30,000 of that
5 was installed in the last 20-years, during which time,
6 of course, there were 0 Megawatts of new nuclear
7 installed. But, that's a comparison. That comparison
8 should be in there because it speaks to the viability
9 of wind and the lack of viability for new nuclear.
10 Now, I know you're promising you're going to build
11 some plants, but I haven't seen them yet. But we have
12 seen the wind come in.

13 The other part of this -- the part that's
14 missing because you can draw a progression -- in 2009
15 there were 9,000 some-odd Megawatts of new wind
16 installed -- wind capacity. That was up 40% from
17 2008. Okay? You can also almost start to build a
18 trend from that, but what's missing here is the trend
19 from 20-years ago for new wind capacity. Not only
20 that, you've got that motion -- the hand goes up. You
21 know, Bob Dylan said -- The times they are a-changing.
22 But he should've said -- The times they are a-
23 changing and the rate at which the changes are taking
24 place is also increasing. This is true across the
25 board for alternatives. Your report doesn't consider

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1 any of it. The other thing that's missing, which you
2 have in the SAMA considerations -- you've got a price
3 on human life -- a cost-benefit analysis. That's
4 there.

5 But, in your analysis of Alternatives --
6 there is little or no cost benefit analysis included.

7 And further, in terms of cost, there's no trending.
8 The price of installed solar has been going down. The
9 price of installed wind power has been going down.
10 There's no acknowledgment of that nor is there any
11 acknowledgement of the rate of change in the decline
12 of cost in these. And it's important because by doing
13 an early license renewal, you're put in the
14 preposterous position of trying to project out 20-
15 years on this stuff. You know? If you went back 20-
16 years -- and I have -- looking at all the DOE
17 projections and everything for Alternatives 20-years
18 ago -- in no way did they reflect the reality of
19 what's happening in the marketplace today.

20 And you're trying to analyze for the
21 period of extended operation -- you're forced to be
22 looking 20-years ahead. Without including some
23 trending. Without including trending on available
24 capacity, on construction of transmission lines, on
25 the cost of it. You've got nothing. I think the

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1 failure to include these completely invalidates your
2 entire section on Alternatives. You really need to go
3 back and talk to -- if you don't have the expertise at
4 the Agency -- by the way, I am disappointed that you
5 didn't bring experts to this meeting so that you could
6 have answered the questions that were asked earlier --
7 you might anticipate those. But if you don't have
8 experts in the Agency to go and get on and Google the
9 numbers, then go to your sister agencies -- go to DOE
10 or whoever and get the numbers. But they're not in
11 your report. So that's my criticism on that.

12 The other thing is that when the Fukushima
13 thing happened, we went right to the question -- the
14 NRC nationally and locally has been saying -- Well,
15 yes, but what are the chances that we're going to have
16 an earthquake and a tsunami on the East Coast of the
17 United States -- zero. Well, what we did is we went
18 to the computer and if you do it and you go to the
19 Maine Geodetic Survey at the state of Maine web site,
20 you will find that in the early part of the last
21 century -- I think it was 1924 -- there was a 4.2
22 earthquake and a consequent landslide on the Grand
23 Banks and it resulted in a tsunami that when it hit
24 the shores of Newfoundland and was driven up into the
25 bays -- narrowed in the bays -- put up waves in excess

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1 of 95 feet. It's no joke and in geologic time, which
2 you're supposed to be working in, it's a wink of an
3 eye to yesterday.

4 So these are events that are now. Your
5 report really should be and I guess this is part of it
6 -- the comments -- but it should be a living document
7 and you should be updating it. We shouldn't be
8 looking at data from 2009 and data from 2010. And
9 certainly sterling events like the Fukushima event
10 should be a signal to go back to the drawing board and
11 revamp the document. Thank you very much.

12 BRIAN ANDERSON: Raymond -- thank you for
13 those comments. The next speaker is Connie Wilkins,
14 who will be followed by Doug Bogen and then Lee
15 Roberts.

16 CONNIE WILLIAMS: I'm Connie Williams from
17 -- sorry --

18 BRIAN ANDERSON: I'm sorry, Connie.

19 CONNIE WILLIAMS: -- from Kittery, Maine
20 and my concerns are around safety and the evacuation
21 process in the case there is an event. On summer
22 weekends, I avoid as much as possible getting into my
23 car in the Kittery, Maine area. One Saturday this
24 summer coming home from just a 10-minute trip to the
25 grocery store over to Portsmouth, it took me 45-

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1 minutes to come home. Any of you who will drive
2 around Route 95 in the summertime and you can see cars
3 stationary for long periods of time.

4 I'm concerned about the safety plans that
5 have been made and -- are they updated and what are
6 they? I used to live in Newbury, Massachusetts and
7 after Seabrook was built, regulations came out about
8 safety plans and evacuation.

9 Faculty at a private boarding school were
10 listed as being in charge of evacuating all the
11 students in the school. This was the first time the
12 faculty heard about that. No one was consulted. No
13 one was trained. I asked faculty how they responded
14 to this and what they would do. They said they would
15 do the natural thing -- they would go for their
16 families and get their families out of there. Not
17 only that, there is absolutely no means of
18 transportation to get the students out of there. So,
19 what I'm asking is -- what is the plan for evacuation?

20 In this area, the population has increased by 62%.
21 So, what is the written plan? Who is being trained to
22 help in this? Who is working the roadways for a
23 decent evacuation? Thank you.

24 BRIAN ANDERSON: Thank you, Connie. I'm
25 sorry that I said your name wrong three times in a

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1 row. That's my reading problem. Doug Bogen and then
2 Lee Roberts.

3 DOUG BOGEN: For the record, my name is
4 Doug Bogen. I'm executive director of the Seacoast
5 Anti-Pollution League based near here in Exeter, New
6 Hampshire. We are one of the interveners on the
7 relicensing renewal. I was at the scoping session
8 about a year ago and I do have quite a few different
9 points to make. I may make more general comments
10 later, perhaps in the evening session.

11 But I do want to mention a few specific
12 things that didn't look right in reading -- my initial
13 reading of -- the SEIS. Just one general comment as I
14 think others have alluded to before -- the world has
15 really changed in the last year and it's changing
16 rapidly. I think probably too quickly for many of us.

17 I'm not just speaking of Fukushima. Obviously that
18 was a huge event on the world scene -- but regarding
19 renewable energy, the development of new sources, a
20 new approach to our energy development in this
21 country, but even more so in other countries -- in
22 Europe, China, you name it, perhaps more so than in
23 the U.S.

24 But we are facing very different
25 circumstances both in the risks that we face through

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1 natural and unnatural disasters and also in the
2 opportunities for changing our energy system -- our
3 infrastructure -- and providing more safe, clean,
4 affordable power in the future. I may have more to
5 say on that later.

6 But I did want to speak to a number of key
7 points. In my comments in the scoping session, I did
8 say a lot about the effect of the environment on the
9 plant and in particular climate change impacts. I am
10 glad to see that you certainly have done some
11 research. There is quite a few words -- a number of
12 pages -- referring to climate impacts and the general
13 scene of climate change. But I did feel that it was
14 really kind of vague about the specific impacts on the
15 Seabrook plant.

16 You refer to the critical structures at
17 the plant being 20-feet above the mean tide and that
18 doesn't really square with the overall site -- at
19 least as far as U.S.G.S. is concerned -- it's much
20 lower than that. I'm glad to know perhaps that you
21 have your emergency generators and other things above
22 the water level, which of course, wasn't the case at
23 Fukushima.

24 But certainly it would be useful to know
25 regarding the rest of the site -- how high are the sea

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1 walls, the waste storage height, the dry cask storage?

2 How high is that above sea level? The power lines --
3 the transformers -- as we saw the plants in the upper
4 Midwest -- on the Missouri River -- they were running
5 into great difficulties because their power lines
6 transformers were becoming inundated from water. It
7 would be better to have more than one sentence about
8 this because this is increasingly a greater concern
9 regarding future climate impacts.

10 Another point there is -- you do refer to
11 the U.N. IPCC estimates, which are now four to five-
12 years old. The research on them was even older. It
13 should be noted that the IPCC is a consensus document.

14 It's very conservative. The most recent and I think
15 a growing consensus among climate scientists is that
16 the figures they are looking at -- projected with the
17 business as usual approach and our energy system --
18 leads to a doubling in sea level rise over their
19 initial estimates of 1 to 3 feet. It's now they're
20 talking 4 to 5 to even 6 feet of elevation change by
21 the end of this century. That's a huge difference and
22 I know there was a major report in May released in
23 Copenhagen -- I'm sure you can look up the references.

24 It got a lot of attention and it seems that it
25 behooves you to include that in your report. That's

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1 certainly the most recent science and it's been
2 discussed for several years now. So, again, if you go
3 4 or 5-years back, you're way in the past.

4 Just moving on to other air issues, I
5 guess. The atmosphere -- I noticed on the chart in
6 the copy I had that I had gotten online -- on page 4-
7 46 you list a number of emission estimates and it
8 appears that there's a typo actually repeated
9 throughout the page of not using negative exponents.
10 I found this rather amazing. I don't do a lot of
11 scientific notation, but as far as I know, the figure
12 you give of 1.1×10^5 millisieverts, I believe that
13 works out to 10 sieverts, which as far as I understand
14 that's a lethal dose. I think you meant to the
15 negative fifth. So, I hope you go back and correct
16 those. That would get a lot of people very concerned,
17 I think. So, just one specific item.

18 Moving on to waste management. I was very
19 distressed that there didn't seem to be any discussion
20 about the increase -- I believe it would be about a
21 50% increase -- in total spent fuel that you would be
22 dealing with if you renew the license. Is there
23 enough room onsite? How much longer is that waste
24 going to be there? It's my understanding that, you're
25 looking at 2060/2070 -- obviously the country does not

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1 have a plan for the long-term final disposal of
2 storage of that waste. I understand you referred to
3 the Generic EIS on this, but it would be good to have
4 more than one line explaining what the story is there.

5 It's really pretty unclear when you say that --
6 excepting for off-site radioactive collection impacts.

7 Well, that's a pretty big deal.

8 A lot of us in this country would like to
9 know what those might be. It is our concern -- we are
10 all downwind and there should be some discussion of
11 how that waste gets off-site. My understanding is the
12 rail connection there is pretty much dead. It's
13 being, perhaps, converted into a rails to trails --
14 are you going to be taking it out on the highways? I
15 realize these are all issues that need to be addressed
16 anyway and they probably are generically, but it seems
17 like it's worth mentioning in the EIS itself.

18 Just moving on to tritium. There was some
19 mention earlier about this, but I would like to say
20 there's much more information in the SEIS than was
21 previously reported in news reports and anything else
22 I'd seen. I understand the industry is not required
23 to report this. It's a voluntary program. But, it
24 does appear to be worse than what was originally
25 presented. This is a problem that has been going on

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1 for over a decade now. I believe it was 1999 when the
2 initial -- when it was determined that there was a
3 leak. We don't know whether it happened sooner than
4 that because they weren't reporting it. Perhaps the
5 plant owners can tell us that, but it does appear that
6 there is more widespread contamination. In one point
7 on page 4-59, you say that -- the off-site
8 contamination wasn't observed. Well, I know most of
9 the off-site is the salt marsh -- if you're looking
10 down gradient -- so are you saying we didn't see it in
11 the seawater, we couldn't measure it in the seawater?

12 In general, it appears that your solution
13 --certainly the way you dispose of this or the plant
14 is disposing of this contaminated water -- is to send
15 it out the out-fall pipe and I understand that's the
16 regulatory approach that we use, but we need to accept
17 that the solution you're applying is dilution -- Well,
18 let's just put it out into a larger body of water and
19 it'll sort of go away. I understand that's the
20 regulatory regime you're under, but there's real
21 questions about whether that makes sense given that
22 there's no safe level of radiation. We really need to
23 be keeping in mind -- I'm sure you all are very aware
24 of the BEIR VII report that there's no safe levels of
25 radiation. However small you may say the air

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1 emissions, the water emissions are, the fact is they
2 do stay in the environment -- the half-life of tritium
3 is over 12-years. These other elements that are
4 coming out, which are not very specified in the report
5 -- we'd like to know more about the disposition of
6 them. Not just that -- Oh, you couldn't measure them
7 in the fish or the water or the soil. We need a much
8 more thorough explanation of that.

9 I suspect my time is almost up. But I do
10 hope you will be able to make some of these changes
11 and I probably will have written comments later. But
12 we do think that there are a number of ways that this
13 report can be improved. That the information should
14 be more tight and that we have a better sense of what
15 you're really talking about here because it's our
16 future. We have to live with it and when we're
17 looking 20, 30, 40-years down the road -- we want good
18 projections not just reliance on past performance. We
19 need to be able to know what the impact will be. So,
20 I think I'll leave it at that. Thank you.

21 BRIAN ANDERSON: Doug -- thank you for
22 those comments. The next speaker is Lee Roberts and
23 we will then have Paul Gunter speak.

24 PAUL GUNTER: I'm speaking tonight. I
25 didn't request to speak this afternoon.

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1 BRIAN ANDERSON: I see that now, Paul.
2 Thank you. I'll save this card for tonight.

3 LEE ROBERTS: Thanks. Hi, I've already
4 spoken my piece, I realize. So, I will be very brief.

5 I just want to say, as a layman, that I feel like
6 what I've heard today tells me not only should we even
7 consider this extension of the license -- as far as I
8 feel, after hearing all that I heard today and I came
9 in here concerned, but now I'm multi-concerned --
10 many, many worries. I feel as if everything should
11 stop. That we're in danger now -- far more than any
12 of us had thought. Never mind with an extension.
13 There are just so many problems we've heard about
14 today. It just doesn't seem that it makes any sense
15 for us to have this even operating until all of these
16 issues have been resolved. Thanks.

17 BRIAN ANDERSON: Thank you, Lee. The next
18 speaker is Sandra Koski. Did I get any of that right,
19 Sandra?

20 SANDRA KOSKI: Yes. Sandra Koski from
21 Newton, New Hampshire. I've been in the area for most
22 of my life and 35-years ago was involved in some of
23 the civil disobedience -- even under the threat of
24 having our children taken away from us because we were
25 trying to protect their environment. The one thing

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1 that I have always focused on and all I really needed
2 to know is there is no place for the radioactive
3 waste. It's now being stored at Seabrook, which they
4 said was never going to happen. It's a nuclear waste
5 dump. That's all I have to say. Thank you.

6 BRIAN ANDERSON: Thank you. Thank you,
7 Sandra. Sandra was the last speaker that I had a
8 registration card for. I'd like to double-check and
9 make sure that there's no one in the room that filled
10 out a card to speak this afternoon that I might have
11 missed? If you indicated on your card that you would
12 either like to speak this evening or if you wanted to
13 speak in both sessions, you do not need to fill out a
14 second card when you come back this evening. We'll
15 keep those cards and have you on the list for speakers
16 tonight. Yes, Sir.

17 PAUL GUNTER: I'd like to defer the spot
18 that you gave me to Mr. Brian Stern.

19 BRIAN ANDERSON: Thank you for that
20 perfect segue. There is extra time left in the
21 meeting. I know that Brian had asked for additional
22 time to finish some comments. And I had one other
23 gentleman that also asked for an extra two-minutes to
24 provide his extra comments. Since the meeting agenda
25 can accommodate that, what I'd like to do is have Mr.

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1 Tilbury get two-minutes to provide his last comments
2 and then we'll finish with five more minutes to Brian
3 Stern.

4 Mr. Tilbury --

5 DON TILBURY: Thank you very much. This
6 had nothing to do with just your nuclear power plant.

7 Just in listening to everything, it occurred to me
8 that at our men's meeting at our church, most of the
9 men were in their 80's. We had a seventh grader that
10 came and talked to us. All he said, very briefly --
11 as I look around -- he said -- I see that when you
12 were my age, there was no nuclear power. There was no
13 TV. There was no cell phone. None of that. I can
14 only imagine that when I'm your age, I don't know what
15 it's going to be, but it will be all different. And I
16 thought that was very, very deep. So, even what we do
17 here might be all different -- there may be a whole
18 new way to have energy later on -- who knows? Nobody
19 knows. Thank you.

20 BRIAN ANDERSON: Thank you for those
21 comments. Brian --

22 BRIAN STERN: Thank you. I'm Brian Stern.

23 I'd like to pick up on the issue of aquatic resources
24 -- the acknowledged impact on winter flounder, rainbow
25 smelt and kelp is large. As I read the Draft SEIS, it

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1 talks about mitigation of the impact to those. And as
2 I read it, the mitigation is that NextEra would
3 monitor the effect on the species of concern in other
4 locations, such as the transmission lines. I know
5 that doesn't make sense, but that's how I read it.
6 Certainly, correct me if I'm wrong on that. But it
7 seems to be that there's actually no mitigation itself
8 for the impact on rainbow smelt, winter flounder and
9 kelp.

10 As I read again the Cumulative Impact on
11 these -- it then concludes that the Cumulative Impact
12 from all of the other factors, including Seabrook,
13 then makes it a Small impact rather than a Large
14 impact. I reject the premise that a species of
15 concern can absorb the additional impact of the power
16 plant since it already is stressed by these other
17 factors and that looking at the cumulative factors is
18 a poor excuse for accepting the impact. The Draft EIS
19 recognizes that the species are very important to the
20 area. They're very big in the area and impacted
21 greatly. There's letters from state and federal
22 agencies talking about the importance of the fishery
23 in this area and they expressed great concern for the
24 impact. So, you have the agencies charged with
25 monitoring the marine fisheries expressing concern,

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1 yet in the NRC's conclusion, over those experts, are
2 that it's -- I guess -- another unavoidable adverse
3 impact.

4 I'd like to address wind as the
5 alternative and it's dismissed as an alternative based
6 upon it being intermittent. Yet, the report's
7 discussion of wind says -- that wind has a relatively
8 high reliability. It says that -- there are strategic
9 and tactical options under development, currently.
10 The conclusions that the NRC reaches concerning wind
11 does not match its finding concerning wind. And it
12 relies upon a finding that there's no combination of
13 wind and compressed air storage that's yet been
14 proposed and it's relying upon a 2008 study. A lot
15 has happened in four-years.

16 The report notes that concern with
17 intermittent wind can be addressed by combinations of
18 onshore and offshore wind where offshore wind is
19 blowing most all the time and the development of
20 onshore wind -- I'm sorry -- of offshore wind is where
21 a lot of the development is taking place in wind power
22 because of the reliability of wind offshore. So, I
23 think the report is in error to simply dismiss wind
24 based on its intermittent nature when that can be
25 addressed by the combination of onshore/offshore by

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1 variable locations and developments that have taken
2 place in storage of energy capacity -- whether it's
3 pumped hydro where water is pumped up the tanks for
4 later disbursement or to reservoirs, batteries and
5 compressed air storage.

6 I'd like to address the issue of spent
7 fuel. The facility was not designed for on-site
8 storage. It was not intended as a licensed storage
9 facility. It's not designed for storage. It's not
10 designed for long-term storage and the storage
11 facility is not secured from the types of natural
12 disasters we've discussed or from terrorist acts. The
13 storage is not that. The stored fuel is expected to
14 be kept on-site for 60-years after closure. I don't
15 think that you can assume that you will have 60-years
16 of management from NextEra going to 2110. I think
17 that would be an erroneous assumption to expect some
18 corporate entity to exist and remain responsible for
19 safe storage that long into the future.

20 The entire premise of safe operation is
21 having to do with the spent fuel. I don't think that
22 anyone can assume that the federal government will
23 take this over. I think that the current assumption
24 is that the federal government will not establish a
25 repository sufficient for Seabrook. People talk about

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1 Yucca and even if Yucca was built, it would not have
2 sufficient capacity for Seabrook.

3 I'd like to talk about the concrete issue.

4 I don't know how you separate out safety issues from
5 environmental issues because if there's a safety issue
6 from concrete, it's obviously going to affect the
7 environment. Your power plant cannot manage the
8 effects of aging on the concrete. It will worsen. I
9 don't think that the process is accurate when it
10 assumes based upon a 20-year history we can predict
11 the next 20-years of the existing license and another
12 20-year beyond that. There's not necessarily a linear
13 degradation of the plant.

14 The licensing processes concerns the
15 ability of the licensee to manage the aging plant
16 components. When it comes to the concrete, it cannot
17 do that. I think that the integrity of the company on
18 this issue also has to be raised. NextEra was asked,
19 I think up to 15-years ago, to assess the concrete and
20 it failed to do so and failed to report to the NRC on
21 that until it came up through this renewal process
22 where it finally disclosed the problems with the
23 concrete, which are significant.

24 There's also the question of the integrity
25 in the building process. This goes to the heart of

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1 the matter. At the time that the plant was built, we
2 all knew and heard the stories about all the crap that
3 was dumped in the concrete. And it's coming back to
4 haunt you. We heard all during the building process
5 from our local neighbors about welds -- the x-raying
6 and testing of welds -- being forged and fraudulently
7 documented. So there is a question with regards to
8 the integrity of the licensee to be able to manage
9 this process and I don't know how the assumptions can
10 be made for 60-years out from now -- I'm sorry -- 40-
11 years out from now on the concrete. And the licensee
12 has the burden of proof, has the obligation to prove
13 the plant safe for this time period through -- I'm
14 losing track now what years we're talking about --
15 through 2050. I don't think that can be done. The
16 concrete raises such a high level of uncertainty that
17 I don't think the burden of the applicant to prove the
18 plant safe for this renewal period can be met.

19 I'd like to make one last comment. Each
20 one of these issues seem to be taken in isolation.
21 And there seems to be no analysis in the Draft EIS of
22 the cumulative effect of these flaws. So, you can
23 piecemeal this little issue, that little issue and
24 this little issue and say --

25 Well, the air release is minimum. The

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1 tritium is a minimum issue. Spent fuel will be dealt
2 with -- they'll design and build one as necessary.
3 Well, earthquakes, you know, they're remote -- they
4 could happen, but not likely.

5 You know, and you add up all of these
6 factors -- there's no analysis of the cumulative
7 effect of these factors. There must be a way to do
8 that and there should be a way to do it, otherwise I
9 don't think the plant is taken in its totality and it
10 exists as a total entity and the effects are a
11 cumulative total effect on the residents of the area.

12 Thank you.

13 BRIAN ANDERSON: Thank you, Brian, for
14 those comments. And thank you again to everybody else
15 that took time to be here today and provide comments.

16 Dave -- did you want to make some final
17 remarks or is there anything else that you wanted to
18 say before we close the meeting?

19 DAVE WRONA: Just that [indiscernible] --

20 BRIAN ANDERSON: Okay.

21 BILL RAYMOND: I'll be available
22 afterwards for anybody who wants to go over anything.

23 BRIAN ANDERSON: Okay. Bill Raymond, the
24 Senior Resident Inspector at Seabrook, just said that
25 he would be available afterwards for anybody that has

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1 any additional questions or follow-up discussion with
2 the NRC.

3 On behalf of the NRC, I want to thank
4 everybody for taking the time to be here today and
5 provide comments. Public participation is an
6 important part of the NRC's safety mission and we
7 certainly appreciate everybody taking time out of
8 their personal lives to come and provide comments.

9 Thank you again for being here. Please
10 travel home safely. Have a great day.

11 This meeting is adjourned.

12 (Whereupon, at 4:10 p.m., the public
13 meeting was closed)

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Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Seabrook Station License Renewal
 Public Meeting - Evening Session

Docket Number: (n/a)

Location: Hampton, New Hampshire

Date: Thursday, September 15, 2011

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

+ + + + +

PUBLIC MEETING TO DISCUSS
PRELIMINARY SITE-SPECIFIC RESULTS OF THE
LICENSE RENEWAL ENVIRONMENTAL REVIEW FOR

SEABROOK STATION

+ + + + +

Upper Great Hall

One Liberty Lane

One Liberty Lane East

Hampton, New Hampshire 03842

+ + + + +

Thursday, September 15, 2011

7:00 p.m.

FACILITATOR:

BRIAN ANDERSON

NRC STAFF PRESENTING:

MICHAEL WENTZEL, Environmental Project Manager, Office
of Nuclear Reactor Regulation

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

(7:00 p.m.)

1
2
3 BRIAN ANDERSON: Good evening ladies and
4 gentlemen. This is the Nuclear Regulatory Commission
5 meeting to discuss license renewal for the Seabrook
6 Nuclear Power Station.

7 My name is Brian Anderson. I will be the
8 facilitator for tonight's meeting.

9 The purpose of this meeting is to discuss
10 the Draft Supplemental Environmental Impact Statement
11 related to the license renewal review for Seabrook
12 Nuclear Power Station.

13 The NRC staff will make a presentation.
14 We'll have a brief question and answer session, but
15 the main purpose of today's meeting is to hear your
16 comments on the NRC's review. The NRC's review of the
17 Seabrook license renewal application is not yet
18 complete. The comments that are provided today and
19 after this meeting will be considered by the NRC staff
20 before it issues its Final Supplemental Environmental
21 Impact Statement sometime next year.

22 I'd like to start by introducing some of
23 the NRC staff members that are here tonight. I'd like
24 to introduce Mr. Mike Wentzel. Mike is the
25 Environmental Project Manager for the Seabrook license

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1 renewal review. I'd also like to introduce Mr. Rick
2 Plasse -- Rick is the Safety Project Manager for the
3 Seabrook license renewal review. Dave Wrona is the
4 Chief of the License Renewal Projects Branch Number 2.
5 Mike, Rick and Dave all work in the NRC headquarters
6 facility near Washington, DC.

7 I'd also like to introduce Diane Screnci -
8 - Diane is in the back. She's a Public Affairs
9 officer with the Region 1 office the NRC maintains
10 near Philadelphia. I'd also like to introduce Mr.
11 Rich Conte. Rich is the Chief of Engineering Branch
12 Number 1, also located at the NRC's Region 1 office
13 near Philadelphia. I'd also like to introduce Mr.
14 Bill Raymond. Bill is the Senior Resident Inspector
15 here at the Seabrook Station.

16 For those that don't know, the Nuclear
17 Regulatory Commission has at least two Resident
18 Inspectors assigned to each nuclear power plant in the
19 United States. NRC Resident Inspectors live in the
20 local communities and they perform daily safety
21 reactor inspections at every nuclear power plant in
22 this country.

23 I'd also like to introduce a member of
24 Senator Ayotte's office that's here tonight -- Mike
25 Scala -- in the back. I'd like to thank Mike for

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1 taking the time to join us tonight.

2 I'd like to cover a few housekeeping items
3 before we get into the formal part of the presentation
4 and meeting tonight. I think everybody probably
5 noticed that there are tables of materials in the
6 lobby as you came into the auditorium. Please feel
7 free to help yourself with paper copies of any NRC
8 literature that's there -- for use during this meeting
9 and even afterwards. I'd also ask -- to help minimize
10 distractions during the meeting -- if you could please
11 silence your cell phones. Either turn them off or put
12 them in vibrate mode -- whatever you prefer.

13 The agenda for tonight's meeting's going
14 to start with a formal presentation by the NRC staff.
15 We'll follow that with a short question-and-answer
16 session. We'll then move to hearing your comments.
17 Because the main purpose of this meeting is to hear
18 public comments related to the Seabrook license
19 renewal and Environmental Review, we've allotted 25-
20 minutes for the NRC presentation and 25-minutes for
21 the question-and-answer session. We wanted to leave
22 the majority of the time for hearing your comments.
23 So that's what the remaining two-hours of the meeting
24 are set aside for.

25 During the question-and-answer session --

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1 I'll say this again after the presentation's done --
2 the NRC staff is prepared to talk about the review
3 process and the preliminary results of the
4 Environmental Review that's taken place for the
5 Seabrook license renewal application. Since only a
6 limited number of NRC technical staff are here, NRC
7 staff might not be able to answer all questions that
8 you have. They'll certainly be prepared to answer
9 questions related to this review process and to the
10 preliminary results of the Environmental Review, but
11 other questions might need to be taken as comments.
12 We might need to follow-up with you later outside of
13 this meeting.

14 And because there are very few NRC
15 technical experts that are here at the meeting
16 tonight, the NRC staff does not intend to respond to
17 comments that you provide during the last two-hours of
18 the meeting. The NRC will provide written responses
19 to all comments it receives -- not just at this
20 meeting, but for the remainder of the comment period
21 that follows this meeting.

22 Finally, before we get started, I'd like
23 to just cover a few ground rules for tonight's
24 meeting. There are a number of people that have
25 signed-up to provide comments. So, based on the

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1 number of people that have signed-up -- I'd like to
2 ask that everybody please be concise and please limit
3 your time to five-minutes when you provide comments.
4 I wanted to set the stage there so that everybody has
5 an opportunity to provide comments. And that
6 everybody has an equal amount of time. In the event
7 that you are not able to provide all the comments that
8 you want during the five-minute period, if there's
9 time left over at the end of the meeting we'll
10 certainly allow you to provide additional comments.

11 But providing comments at this meeting
12 here today is not the only way to provide comments.
13 You don't necessarily have to say anything at this
14 meeting for your comments to be registered by the NRC.

15 There are other ways to do that and NRC staff will
16 discuss that during their presentation.

17 There's a court reporter in the back of
18 the room. We are transcribing this meeting so we have
19 a clear record of what's said here. So, to help with
20 that process, I'd like to ask that anybody that likes
21 to speak, please only speak into a microphone. During
22 the question-and-answer session and during the comment
23 period, I'll provide a microphone for you to speak.
24 For those same reasons, I'd also like to ask that we
25 only have one person speak at a time. It's very

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1 important that we have a clear transcript of what is
2 said here tonight, so everybody that speaks --
3 speaking into a microphone and only having one person
4 talk at a time is a very good way to make sure that
5 we've got a clear record of what happens tonight.

6 Lastly, I'll say that it's possible that
7 you're going to hear opinions that might be different
8 from your own tonight. I'd like to ask that we treat
9 each other with respect and courtesy during this
10 meeting.

11 Do those ground rules sound like something
12 that everybody can live with?

13 PAUL GUNTER: Absolutely.

14 BRIAN ANDERSON: Good. Thank you. With
15 that, I'll turn it over to the NRC staff for a
16 presentation. Mike --

17 THOMAS SAPORITO [via telephone]: Just a
18 quick question -- are you going to notify us with
19 about one-minute left at the end of five-minutes?

20 BRIAN ANDERSON: The question was --
21 During the five-minute comment period, will I notify
22 you as your time is winding down? I certainly can do
23 that. What I have a habit of doing is standing in the
24 back while comments are being made and as time
25 approaches five-minutes, I'll slowly start to move

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1 forward. So, the closer I get to the podium, the
2 closer you are to your five-minutes and probably over.

3 So, I'm not trying to infringe on your space, but
4 that's a way of keeping time.

5 THOMAS SAPORITO: Thank you.

6 BRIAN ANDERSON: A-hmm. Mike --

7 MICHAEL WENTZEL: Great. Good evening.

8 As Brian said earlier, my name's Mike Wentzel. I am
9 the Project Manager at the NRC that's responsible for
10 coordinating the Environmental Review activities for
11 the Seabrook Station license renewal application. I
12 gave this warning earlier today and I'd like to give
13 it as well -- I don't have a good --

14 THOMAS SAPORITO: [indiscernible]

15 MICHAEL WENTZEL: We do have somebody on
16 the phone that's participating in the meeting this
17 evening.

18 BRIAN ANDERSON: Mike -- hold on for just
19 second. Let me see if I can position this phone a
20 little closer to the speaker.

21 For those on the phone, I moved the phone
22 probably as close as I can to one of the speakers here
23 in the room. Does that sound like it's any better?

24 THOMAS SAPORITO: I can hear you loud and

25 --

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1 BRIAN ANDERSON: Okay.

2 MICHAEL WENTZEL: Anyway, as I was saying
3 -- I don't have an indication of what slide I'm on.
4 So if it looks like I'm out of sync with what the
5 presentation is, please just call my attention to it
6 and I'll try to get back into sync.

7 Okay. On August 1st, the NRC published
8 its Draft Supplemental Environmental Impact Statement
9 -- or Draft SEIS as we refer to it -- related to the
10 Seabrook Station license renewal Environmental Review.

11 The Draft SEIS documents the NRC's preliminary review
12 of the environmental impacts associated with renewing
13 the license for Seabrook Station for an additional 20-
14 years and today I'm here to present those results to
15 you.

16 I hope that the information that we
17 provide will help you understand what we've done so
18 far and the role that you can play in helping us to
19 make sure that the Final Impact Statement is accurate
20 and complete.

21 Here's the agenda for the meeting this
22 evening. I'm going to discuss the Agency's regulatory
23 role; the preliminary findings of our Environmental
24 Review, including the power generation alternatives
25 that were considered; I will present the current

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1 schedule for the remainder of the Environmental
2 Review; and how you can submit comments outside of
3 this meeting. From there, I will take time to briefly
4 discuss two-topics that are not related to the
5 Seabrook Station license renewal application process,
6 and those are going to be -- well, let me correct that
7 -- the Environmental Review of the Seabrook Station
8 license renewal application. These are the concrete
9 issues at Seabrook and the NRC's response to
10 Fukushima.

11 At the end of the presentation, there will
12 be time for questions and answers on the Environmental
13 Review process and most importantly, time for you to
14 present your comments on the Draft SEIS.

15 The NRC was established to regulate
16 civilian uses of nuclear material including facilities
17 that produce electric power. The NRC conducts license
18 renewal reviews for plants whose owners wish to
19 operate them beyond their initial license period. The
20 NRC license renewal reviews address safety issues
21 related to managing the effects of aging and
22 environmental issues related to an additional 20-years
23 of operation. In all aspects of the NRC's regulation,
24 the Agency's mission is threefold: to ensure adequate
25 protection of public health and safety; to promote

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1 common defense and security; and to protect the
2 environment.

3 Am I out of sync? Sorry about that.

4 We're here today to discuss the potential
5 site-specific impacts of license renewal for Seabrook
6 Station. The Generic Environmental Impact Statement,
7 which is referred to as the GEIS -- examines the
8 possible environmental impacts that could occur as a
9 result of renewing licenses of individual nuclear
10 power plants under 10 CFR Part 54. The GEIS, to the
11 extent possible, establishes the bounds and
12 significance of these potential impacts. The analyses
13 in the GEIS encompass all operating light-water
14 reactors. For each type of environmental impact, the
15 GEIS attempts to establish generic findings covering
16 as many power plants as possible.

17 For some environmental issues, the GEIS
18 found that a generic evaluation was not sufficient and
19 that a plant specific analysis was required. The
20 site-specific findings for Seabrook are contained in
21 the Draft SEIS, which was published on August 1st of
22 this year. This document contains analyses of all the
23 applicable site-specific issues, as well as a review
24 of issues covered by the GEIS to determine whether the
25 conclusions in the GEIS are valid for Seabrook

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1 Station.

2 In this process, the NRC staff also
3 reviews the environmental impacts of potential power
4 generation alternatives to license renewal to
5 determine whether the impacts expected from license
6 renewal are unreasonable.

7 For each environmental issue identified,
8 an impact level is assigned. The NRC standard of
9 significance for impacts was established using the
10 White House Council on Environmental Quality
11 terminology for 'significant'.

12 The NRC established three levels of
13 significance for potential impacts: Small, Moderate
14 and Large -- as defined here on the slide. For a
15 Small impact -- the effects are not detectable or are
16 so minor that they will neither destabilize nor
17 noticeably alter any important attribute of a
18 resource. For a Moderate impact -- the effects are
19 sufficient to alter noticeably, but not to destabilize
20 important attributes of the resource. And for a Large
21 impact -- the effects are clearly noticeable and are
22 sufficient to destabilize important attributes of a
23 resource.

24 This slide lists the site-specific issues
25 the NRC staff reviewed for the continued operation of

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1 Seabrook Station during the proposed license renewal
2 period. As discussed in the previous slide, each
3 issue is assigned a level of environmental impact of
4 Small, Moderate or Large by the environmental
5 reviewers. The staff's preliminary conclusion is that
6 the site-specific impacts related to license renewal
7 for aquatic resources is Small for most species and
8 Large for winter flounder, rainbow smelt and some kelp
9 species due to the impact of the operation of
10 Seabrook's once-through cooling system.

11 Similarly, for protected species and
12 habitats -- the staff's preliminary conclusion is that
13 the impacts related to license renewal are Small for
14 most species and Large for rainbow smelt -- a species
15 identified by the National Marine Fishery Service as a
16 species of concern. For all other resource areas, the
17 impacts are Small.

18 Now, when reviewing the potential impacts
19 of license renewal on the environment, the NRC staff
20 also looks at the effects on the environment from
21 other past, present and reasonably foreseeable future
22 human actions. These effects, referred to as
23 Cumulative Impacts, not only include the operation of
24 Seabrook, but also impacts from activities unrelated
25 to Seabrook -- such as the development of the East

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1 Coast Greenway, commercial fishing and climate change.

2 Past actions are those related to the resources at
3 the time of the power plant's licensing and
4 construction. Present actions are those related to
5 resources at the time of the current operation of the
6 power plant. Future actions are considered to be
7 those that are reasonably foreseeable through the end
8 of the plant operation, including the period of
9 extended operation.

10 Therefore, the analysis considers
11 potential impacts through the end of the current
12 license renewal term, as well as the 20-year renewal
13 term. While the impact due to direct and indirect
14 impacts of Seabrook on aquatic resources is Small for
15 most species and Large for winter flounder, rainbow
16 smelt and some kelp species -- the Cumulative Impacts,
17 when combined with all other sources -- such as
18 pressure from commercial fishing and effects of
19 climate change -- will be Moderate for most species
20 and Large for winter flounder, rainbow smelt and other
21 species that would be adversely affected by climate
22 change. In the other areas the staff considered --
23 the preliminary conclusion is that the Cumulative
24 Impacts are Small.

25 The National Environmental Policy Act

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1 mandates that for each Environmental Impact Statement,
2 there needs to be a consideration of alternatives to
3 any proposed major federal action. A major step in
4 determining whether license renewal is reasonable or
5 not is comparing the likely impacts of continued
6 operation of the nuclear power plant with the likely
7 impacts of alternative means of power generation. Any
8 alternative must provide an option that allows for
9 power generation capability beyond the term of the
10 current nuclear power plant operating license to meet
11 future system generating needs. In the Draft
12 Supplement, the NRC staff initially considered (16)
13 different alternatives. After this initial
14 consideration, the staff then chose the three most
15 likely and analyzed these in depth.

16 Finally, the NRC staff considered what
17 would happen if no action is taken and Seabrook
18 Station shuts down at the end of its current license
19 without a specific replacement alternative. This
20 alternative would not provide power generation
21 capacity nor would it meet the needs currently met by
22 Seabrook Station.

23 The NRC's preliminary conclusion is that
24 there is no clear environmentally preferred
25 alternative to license renewal. All alternatives

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1 capable of meeting the needs currently served by
2 Seabrook Station entail impacts greater than or equal
3 to the proposed action of license renewal.

4 Based on a review of likely environmental
5 impacts from license renewal, as well as potential
6 environmental impacts to alternatives to license
7 renewal -- the NRC staff's preliminary recommendation
8 in the Draft SEIS is that the environmental impacts of
9 license renewal for Seabrook Station are not great
10 enough to deny the option of license renewal.

11 Now, I'd like to emphasize that the
12 Environmental Review is not yet complete. Your
13 comments that you present today -- and all written
14 comments received by the end of the comment period on
15 October 26th -- will be considered by the NRC staff,
16 as we develop the Final SEIS, which we currently plan
17 to issue in March of 2012. Those comments that are
18 within the scope of the Environmental Review and
19 provide new and significant information can help to
20 change the staffs' findings. The Final SEIS will
21 contain the staff's final recommendation on the
22 acceptability of license renewal based on the work
23 we've already performed and any new and significant
24 information we received in the form of comments during
25 the comment period.

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1 Now, as I said in the front of the
2 meeting, I'm the primary contact for the Environmental
3 Review. My colleague, Rick Plasse, is the primary
4 contact for the Safety Review. And our contact
5 information is here and in the slides that are part of
6 the handout. Hard copies of the Draft SEIS are
7 available outside the door there, as are copies on CD-
8 ROM. In addition, the Seabrook and Amesbury Public
9 Libraries have agreed to make hard-copies available
10 for your review. You can also find electronic copies
11 of the Draft SEIS along with other information about
12 the Seabrook Station license renewal review online at
13 the Web address on the slide.

14 The NRC staff will address written
15 comments in the same way we address spoken comments
16 received today. You can submit written comments
17 either online or via conventional mail. To submit
18 written comments online, visit the web site --
19 regulations.gov and search for Docket ID NRC-2010-
20 0206. If you have written comments this evening, you
21 may give them to any NRC staff member.

22 Now, before we open up the meeting to
23 questions and comments, I wanted to take some time to
24 briefly discuss two topics that are of some interest
25 to people in attendance -- those are the concrete

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1 degradation at Seabrook and the NRC's response to
2 Fukushima. While these issues are not related to the
3 Seabrook Environmental Review and are therefore not
4 specifically addressed in the Draft SEIS, they are
5 issues that are being actively addressed through
6 relevant Agency processes.

7 Alkali-silica reaction -- referred to as
8 ASR -- is a process that can occur in some forms of
9 concrete that have been exposed to water for long
10 periods of time. ASR can cause expansion and cracking
11 in concrete structures. During the course of the
12 license renewal process, ASR related degradation was
13 found at Seabrook. As discussed during the annual
14 assessment public meeting on June 8th, there are no
15 immediate safety concerns associated with ASR at
16 Seabrook. NRC has found no problems with any
17 electrical system, piping or any other component as a
18 result of ASR and the concrete walls continue to
19 perform within design specifications. The evaluation
20 of ASR and its impacts on license renewal is being
21 addressed as part of the Safety Review.

22 Additionally, the NRC has requested
23 NextEra explain how it intends to manage the effects
24 of aging associated with ASR. The NRC has delayed the
25 license renewal Safety Review until NextEra completes

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1 its evaluation and addresses the staffs' questions.
2 The NRC will not make a decision on license renewal
3 before it fully understands both the issues with ASR
4 affected structures and NextEra's plan to address the
5 issues.

6 Now, since the accident at Fukushima, the
7 NRC has taken multiple steps to ensure the safe
8 operation of nuclear power plants both now and in the
9 future. As part of its initial response to the
10 accident, the NRC issued temporary instructions to our
11 inspectors directing specific inspections at nuclear
12 power plants in order to assess disaster readiness and
13 compliance with current regulations. The next step in
14 the NRC's review was the report of the NRC's Near-Term
15 Task Force. The purpose of the Near-Term Task Force
16 was to develop near-term recommendations and suggest a
17 framework for us to move forward within the longer
18 term.

19 The Near-Term Task Force issued its report
20 on July 12th and discussed the results of their review
21 at a public meeting on July 28th. As a result of its
22 review, the Near-Term Task Force presented (12) over-
23 arching recommendations for improvement. These
24 recommendations are applicable to operating reactors
25 regardless of license renewal status. Based on the

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1 results of the Near-Term Task Force, the Commission
2 has directed the NRC staff to evaluate and outline
3 which of the recommendations should be implemented.

4 The staff submitted a paper to the
5 Commission on September 9th, providing the staffs'
6 initial recommendation of which Task Force
7 recommendations can and -- in the staffs' judgment --
8 should be initiated in part or in whole without delay.

9 On October 3, 2011, the staff will submit another
10 Commission paper on its prioritization of (11) of the
11 (12) Task Force recommendations.

12 Recommendation 1 of the Task Force -- the
13 recommendation to reevaluate the NRC's regulatory
14 framework will be evaluated over the next 18-months.
15 To date, the NRC has not identified any issues as part
16 of these activities that calls into question the
17 safety of any nuclear facility. Additionally, the
18 review process is going on independent of license
19 renewal. Any changes that are identified as necessary
20 will be implemented for all licensees regardless of
21 license renewal status.

22 For more information on the NRC's post-
23 Fukushima activities, -- including the results of the
24 Near-Term Task Force -- you can go to the NRC's web
25 site, the home page and click on the link -- Japan

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1 nuclear accident NRC actions -- or you can go directly
2 through the web address that's laid out here on the
3 slide. There are also a limited number of copies of
4 the Near-Term Task Force report available outside next
5 to the Draft Environmental Impact Statement.

6 Additionally, there are question and
7 answer sheets related to Fukushima and Seabrook for
8 those that are interested.

9 Now, before I turn it back over Brian, I
10 did just want to emphasize that we are here today to
11 talk about the Draft Environmental Impact Statement.
12 We do have a limited number of staff -- but we are not
13 experts on everything. So, if we could limit the
14 comments to the extent practical on the Draft
15 Environmental Impact Statement or the Environmental
16 Review process -- you're probably going to get more
17 robust answers than -- there is a lot more information
18 that can be found online on Fukushima, if that's what
19 your question is.

20 Okay, with that I'm going to conclude my
21 presentation and turn it back over to Brian.

22 BRIAN ANDERSON: Thank you, Mike. Like
23 Mike said, before we move to the main purpose of
24 tonight's meeting, which is to hear your comments --
25 we would like to offer a short question-and-answer

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1 session and what I'll do is if you have a question
2 related to anything that Mike just presented or the
3 review process that the NRC's utilized to perform this
4 Environmental Review -- that's what the NRC staff is
5 prepared to answer questions on. If you could raise
6 your hand, I'll come to you with the microphone. I'll
7 circulate through the room to cover as many people
8 that have questions during the time we have set aside
9 for it.

10 Yes, ma'am. And if you could, please,
11 when I bring you the microphone, just for the record,
12 if you wouldn't mind stating your name, just so that
13 we can keep track of who asked what questions.

14 ILSE ANDREWS: I thank you. My name is
15 Ilse Andrews. I live in Exeter, which is in the
16 evacuation zone. I would like to know how you know
17 that ASR will not accelerate 20-years hence?

18 BRIAN ANDERSON: Thank you, Ilse, for that
19 question. Dave --

20 DAVE WRONA: Right now, ASR is being
21 addressed in our Safety Review of the license renewal
22 application. We don't have the information from the
23 applicant on how they're going to be addressing this
24 in performing the aging management of the concrete
25 structures that are affected by ASR. We put our

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1 application review on hold until we get the
2 information from them. When we have the information
3 from them, we can commence with our Safety Review.

4 BRIAN ANDERSON: Can I see just a quick
5 show of hands -- who else had questions? Okay --

6 DOUG BOGEN: I'm Doug Bogen with Seacoast
7 Anti-Pollution League. Again, on the Safety Review --
8 it's kind of a process question -- what factors
9 determine whether you hold a hearing? I understand
10 it's kind of optional whether -- according to the
11 chart that was in some of your materials -- how do you
12 decide whether to hold a Safety hearing or not and
13 would you hold it here?

14 DAVE WRONA: When a license renewal
15 application is submitted to the Nuclear Regulatory
16 Commission, we go through an acceptance review to make
17 sure that it has enough information within it that we
18 can begin our technical review. At the point where we
19 find that there's enough information in the
20 application for us to start our review, we docket it
21 on the application and post a Federal Register notice
22 that opens up a period of 60-days for an opportunity
23 for a hearing, which was done when the application was
24 submitted.

25 I'd have to ask Michael or Rick the

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1 specific dates of when we accepted the application and
2 when the initial hearing opportunity closed. Our
3 Regulations on hearings also allow for late filed
4 petitions. I'm not an expert on that. We have a copy
5 of our Regulations out there and I can show you in 10
6 CFR Part 2, if you're interested. I know we have
7 information on our web site and even some staff that
8 you can reach out to to find out some information on
9 hearings and petitions and how to get into that
10 process.

11 DOUG BOGEN: If I could follow-up. I
12 guess I really don't want to read through all your
13 Regulations -- they're not the most exciting reading.

14 But I guess we just want to know whether we might
15 have an opportunity -- particularly concerning the ARS
16 [sic] issue that you brought up. You thought it was
17 important enough to mention it tonight. Seems like
18 that alone would be important enough to hold a hearing
19 here, not down in Washington or somewhere on the
20 Safety Review because obviously a lot of people here
21 have questions that are about Safety as much as about
22 the Environment.

23 I would just say, obviously, we'll see
24 when you get to that point. But, it seems like it
25 would be good of you to notify the concerned people

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1 here -- not just that we have to go read it in the
2 Federal Register. That we ought to be informed of the
3 opportunity to request such a hearing and I just want
4 to pass that along and hope you will do that.

5 BRIAN ANDERSON: Doug, would it be okay if
6 the NRC staff followed-up with you after this meeting
7 -- give you a little more background on that hearing
8 process and late filed petitions.

9 DOUG BOGEN: You have my sentiment about
10 it. I just, obviously, I think many people here would
11 like to know if we have any say in this.

12 DIANE SCRENCI: There were a number of
13 contentions that were submitted on this license
14 renewal application. So, there is an Atomic Safety
15 and Licensing Board panel that's been established and
16 at this point we're moving forward in the hearing
17 process. An actual hearing, which is normally held in
18 the vicinity of the plant, wouldn't be conducted until
19 both the Final Environmental Impact Statement and the
20 Safety Evaluation has been completed.

21 In addition to the Federal Register
22 notice, there were press releases and news stories
23 that talked about the opportunity for the hearing.

24 BRIAN ANDERSON: And just for the record -
25 - Diane Screnci was providing those most recent

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1 comments.

2 PAUL GUNTER: Thank you. My name's Paul
3 Gunter and I'm with Beyond Nuclear. We are one of the
4 interveners in the licensing renewal proceeding on
5 this application. My question speaks to the issue
6 that the Draft Environmental Impact Statement largely
7 reviews the Environmental Report prepared by the
8 applicant. I'm wondering -- given that there've
9 already been hearings in this intervention -- if the
10 staff in its preparation of this Draft Environmental
11 Impact Statement has reviewed not just the
12 Environmental Report by the applicant, but the
13 documentation that's been submitted in the
14 intervention to date. That we now have contentions
15 accepted by the Licensing Board. The interveners have
16 been given standing in the proceeding and when you
17 look at the Environmental Report and then read the
18 Draft Environmental Impact Statement, it appears that
19 the NRC has basically done a carbon copy of the
20 Environmental Report -- and specific, looking at the
21 Alternatives.

22 I'm just wondering how much actual
23 independent review of a whole host of documentation in
24 supplement to the applicant's documentation -- how
25 much of that did you actually review in preparing your

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1 DEIS?

2 BRIAN ANDERSON: Thank you, Paul. And I
3 believe I understand that the question is -- for
4 contentions that have been admitted on a review and
5 supplemental information that's been provided --

6 PAUL GUNTER: Yeah.

7 BRIAN ANDERSON: How does the NRC staff
8 consider that information in its review process? Do I
9 have that right?

10 PAUL GUNTER: I'll try to be more
11 succinct. Did you look at documentation in
12 preparation of your DEIS that was submitted during the
13 hearings to date before an Atomic Licensing Board?

14 BRIAN ANDERSON: Thank you.

15 MICHAEL WENTZEL: I can answer that by --
16 I'd say we don't wholesale rely on the Environmental
17 Report. We do look for other relevant information --
18 either provided during the scoping process, where we
19 did receive input and things that we did take a look
20 at.

21 We also look at other agency studies that
22 have been done. One that I can talk to specifically
23 was the Environmental Protection Agency's case study
24 that they did.

25 THOMAS SAPORITO: [indiscernible] I can't

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1 hear you.

2 . [after a brief pause as adjustments were
3 made to the telephone set-up]

4 MICHAEL WENTZEL: Anyway, as I was saying,
5 we did look at the Environmental Protection Agency's
6 case study that they did as part of their --
7 specifically on Seabrook -- as part of their 316(b)
8 Phase-II rulemaking. We used that in preparation of
9 it. So, we do look at what information that is
10 presented to us and try to determine whether or not it
11 is -- like we said before -- new and significant or
12 different than what we've done before. But I can't
13 say that we've taken everything that we've gotten --

14 PAUL GUNTER: Well, let me just --

15 BRIAN ANDERSON: Paul -- hold on just a
16 second. Let me bring a microphone to you to make sure
17 we get everything captured on the record.

18 PAUL GUNTER: I want to be really clear on
19 this. The Agency has been presented with a volume of
20 documentation that speaks directly to this application
21 and the inadequacy of its Environmental Report --
22 particularly with regard to the Alternatives. All I
23 want to know is -- did you review the documents that
24 were submitted to the Atomic Safety and Licensing
25 Board in preparation of your Draft Environmental

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1 Impact Statement?

2 MICHAEL WENTZEL: It was. It was provided
3 to the environmental reviewer's for their review and -
4 -

5 PAUL GUNTER: And so you reviewed it?

6 MICHAEL WENTZEL: Yeah. Absolutely.

7 PAUL GUNTER: You reviewed the
8 documentation that's been presented to the Atomic
9 Safety and Licensing Board to date.

10 MICHAEL WENTZEL: I cannot say we've
11 reviewed everything that's been presented to the
12 Licensing Board to date. I cannot make that
13 statement, but I know -- particularly with the initial
14 round of contentions that were submitted -- yes, we
15 did look at the information that was presented. And
16 we also -- related to Alternatives -- we also looked
17 for other studies, like I said, with other government
18 agencies. We did look at various FERC studies and
19 cited that in our --

20 THOMAS SAPORITO: I hate to interrupt
21 again, but this is Thomas Saporito. I need to have
22 the NRC repeat their responses to whether or not they
23 reviewed the submittal by the interveners -- the
24 submittal that was sent to the Atomic Safety and
25 Licensing Board before the NRC made its Environmental

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1 Report.

2 BRIAN ANDERSON: And Mike, the answer to
3 that question is -- yes, that information was
4 reviewed. Is that correct?

5 MICHAEL WENTZEL: Right. For the initial
6 round of contentions --

7 PAUL GUNTER: You didn't review
8 everything.

9 MICHAEL WENTZEL: I know. I'm going to
10 clarify that. I said for the initial round of
11 contentions, we did review the information that was
12 presented. I cannot say that we've looked at -- I or
13 the environmental reviewers specifically -- have
14 looked at, in-depth, at everything that has been
15 submitted to date -- is actually what I said.

16 BRIAN ANDERSON: Did those on the phone --
17 were they able to hear the restatement of the answer?
18 That the NRC environmental review staff --

19 THOMAS SAPORITO: Yes, thank you very
20 much. Yes -- yes, thank you very much.

21 BRIAN ANDERSON: Okay. Sir, I'm going to
22 come to a question over here and I'll come back to you
23 -- okay?

24 DEBBIE GRINNELL: This concern that I'm
25 going to raise was raised --

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1 BRIAN ANDERSON: I'm sorry -- would you
2 mind, for the record --

3 DEBBIE GRINNELL: Debbie Grinnell --

4 BRIAN ANDERSON: Thank you.

5 DEBBIE GRINNELL: -- I live in West
6 Newbury, Mass. Paul Gunter, Beyond Nuclear, raised
7 this scheduling concern that many of us have and I do
8 know that the seismic vulnerability -- the individual
9 report from the plants -- is a two-year process. It
10 was submitted to the plants on September 1st of 2011,
11 which means that they have until September 1, 2013 --
12 except the Final SEIS is scheduled for March of 2012.

13 Now, I also know that the in-depth
14 assessment and determination if there's any structural
15 integrity issues at four safety related foundations
16 concerning the ASR concrete -- that the plant has had
17 to delay their testing and core results. I don't
18 think we're expecting them until March. I think it
19 was pending until March of 2011. So, how could you
20 possibly assert that you're going to have a Final
21 Draft of the SEIS when you have two major unknowns in
22 the Environmental Impact review?

23 MICHAEL WENTZEL: I can answer that. The
24 Draft letter that you're referring to -- that's being
25 handled for all licensees. Again, that's being

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1 handled generically for all operators. I can also
2 tell you that for the Draft SEIS for the Seabrook
3 license renewal application -- where that's handled is
4 in the Severe Accident and Mitigation Alternatives.
5 It's not, per se -- it's handled as part of the Severe
6 Accident and Mitigation alternatives. And it's
7 actually the reason that the Environmental Impact
8 Statement -- the Draft SEIS -- was delayed from its
9 initial scheduling date because we had multiple rounds
10 of RAIs with the applicant asking them to assess these
11 new hazard curves and their impact on the Severe
12 Accident and Mitigation -- also known as SAMA --
13 Analysis.

14 ROBIN WILLITS: My name is Robin Willits
15 and I'm a citizen of Exeter, which is within the
16 impact evacuation area. I'm interested in your
17 process tonight. I think inviting people to make
18 comments and that is something that I respect very
19 much and appreciate. I am concerned on this count --
20 this is a very small audience. I think it's good we
21 have people like SAPL -- who have more technical
22 knowledge than somebody like me -- who could raise
23 those good questions. But my question to you is --
24 how important is it to you that the general public
25 know about this meeting and get them to come to this

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1 meeting and have a chance to give some kind of
2 educated comment? How important is it and what
3 specific steps did you take to help ensure the general
4 public would be represented here more than I think it
5 is now here? Such as: giving out some documents of
6 your summary of what we heard tonight -- very briefly
7 and very fast; giving it to the public for some chance
8 to digest beforehand; announcing it in the newspapers
9 or other ways to inform and get the public here to
10 give some comments. I'd like to know that about your
11 process and ask what your desire is and what steps you
12 took?

13 BRIAN ANDERSON: Thank you, sir, for that
14 question. Mike -- can you speak a little bit to the
15 details that go into planning these meetings and how
16 the public is made aware of the NRC process?

17 MICHAEL WENTZEL: I can. This meeting --
18 when we first issued the Draft SEIS, we put notice in
19 the Federal Register announcing that fact. I know
20 that that's not necessarily everybody's first go-to
21 every day. So that was our initial announcement of
22 the availability of the document and that we're going
23 to have this meeting. We've also advertised in two of
24 the local papers. We did three -- I'm sorry, I was
25 distracted by the monitors -- (2) of the local papers,

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1 we did three different advertisements leading up to
2 this meeting. There's also been multiple rounds of
3 press releases that the NRC has issued.

4 When we first initially issued the
5 document and then about two or three-weeks ago, we did
6 another round of press releases to inform the public.

7 We also, about three-weeks ago, put out posters in
8 the area advertising that meeting. So, public
9 involvement in this process is crucial. That's the
10 whole basis behind the National Environmental Policy
11 Act is to get people involved in the process for the
12 federal government. So, to answer that question --
13 public involvement is very important in that.

14 BRIAN ANDERSON: Yes, ma'am. I think we
15 have time for one, maybe two more questions before we
16 take comments.

17 PHYLLIS KILLAM-ABELL: This is a follow-up
18 question to the previous one. When you say -- a
19 couple of newspapers -- what were those newspapers?
20 What newspapers were they?

21 MICHAEL WENTZEL: I have it written down.
22 I'm not familiar with it. I believe it was the
23 Seacoast Online -- it was advertised -- I've seen it
24 there.

25 Do you have a contact sheet?

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1 Here we go -- it was the Daily News,
2 Newburyport News and the Hampton Union. And then the
3 Daily News -- that was advertised on September 9th,
4 12th and 14th --

5 PHYLLIS KILLAM-ABELL: I don't read --
6 excuse me -- but I don't read those newspapers. I
7 live in Exeter. There is an Exeter Newsletter that's
8 published twice a week and there is the Portsmouth
9 Herald that's published that covers the seacoast and
10 that's within the region that will be affected. I
11 would have no way of knowing this. Your publication
12 is not wide enough. I wouldn't know that.

13 MICHAEL WENTZEL: Okay. I apologize for
14 that. I do know that the story was picked up in the
15 Boston Globe -- to what effect that has on it. So it
16 was fairly widely circulated.

17 PHYLLIS KILLAM-ABELL: If you want --
18 really want people to know -- you blanket the
19 seacoast. You blanket the northern part, particularly
20 of Boston. You really let people know. That's not an
21 effective publicity campaign at all.

22 MICHAEL WENTZEL: Okay. Well, thank you
23 for your comments. I think that we'll take that back.

24 BRIAN ANDERSON: That is an important
25 comment for the NRC staff to consider -- the

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1 distribution of newspaper advertising and the local
2 news. Thank you for that comment.

3 One last question before we move into the
4 comment period. Hi --

5 WILLOW MAUCK: Yeah, well, there was a
6 follow-up on that question too because I think -- I
7 was curious as to -- he said what their desire was --
8 how much you wanted to actually get the word out about
9 this thing? And I don't think that that was actually
10 answered in the question. So, I was curious.

11 BRIAN ANDERSON: I think that part of the
12 answer was that -- public participation is an
13 important part of the NRC's review process. I believe
14 that Mike said that. Was there something more
15 specific that you were looking for as a follow-up to
16 that?

17 WILLOW MAUCK: So, that is it. So, it's
18 the SeacoastOnline and those papers. Like she said
19 aren't really very effective press to release to
20 actually have the public know about it. So, it seems
21 that maybe there it is not much desire there on the
22 NRC's behalf to have the public know. So, I was
23 wondering how much it really does mean to the NRC for
24 the public to know about something like this?

25 MICHAEL WENTZEL: I don't know how else to

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1 answer that question. I mean, it is important. I
2 mean, obviously, we didn't cover every publication
3 that we probably could have. But, it wasn't that we
4 were avoiding the public input. Like I said, we did
5 issue a couple rounds of press releases that did get
6 picked up in newspapers that we didn't specifically
7 take out ads in. So, the story was fairly widely
8 available.

9 BRIAN ANDERSON: Thank you both for those
10 questions. The NRC staff will take that as a serious
11 comment for consideration just for future process.
12 It's important for the NRC to make sure that they're
13 aware of how the circulation of news in the local
14 community works and how that can possibly be improved
15 in their routine process.

16 ROBIN WILLITS: If you get a trained
17 marketing person that knows the way to get an idea
18 across.

19 BRIAN ANDERSON: Thank you, sir, for that
20 comment. For those who didn't hear -- the suggestion
21 was to utilize trained marketing expertise, who might
22 better know the various avenues to disseminate
23 information in the local community. Thank you again
24 for that.

25 Thank you all for your questions and we're

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1 now at the most important part of the meeting agenda -
2 - and that is to hear your comments. For those that
3 might have come in late -- if you wish to provide
4 comments on the record tonight, please register with a
5 yellow card out in the lobby. That serves just as a
6 sequence order, so that I can keep track of who has
7 made comments and who is still yet to speak. No one's
8 required to make comments, but if you wish to make
9 comments here -- to be on the record tonight -- please
10 fill out a yellow card and I'll make sure that you get
11 your chance to speak.

12 As a quick reminder, before we get into
13 the comment period -- there are a lot of people that
14 want to talk tonight and I want to make sure that
15 everybody has an equal opportunity to participate.
16 When providing your comments, please speak into a
17 microphone. Please try and keep your comments concise
18 and within a five-minute time limit. This is not your
19 only opportunity to provide comments and making
20 comments here tonight is not the only way to have the
21 NRC take your comments for consideration.

22 The first speaker will be Chris Nord
23 followed by Mary Lampert. What I'd like to ask is
24 that speakers just come forward to the center podium
25 and I'll provide the microphone --

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1 CHRIS NORD: Actually, hang on to it. Let
2 me open up my notebook. Thank you.

3 Well, my first comment is for the NRC to
4 say that -- I think that it's plain that the NRC has a
5 public relations problem and maybe most of all in the
6 area around Seabrook. If you -- as staff members of
7 the NRC -- are interested in helping that process
8 along, it might help to convince the general public
9 that you do actually care about the general public
10 coming to meetings like this, if in fact the comments
11 that were made and documents that were submitted to
12 NRC actually got reviewed in time to be a part of
13 reporting and so that comments such as my own and
14 other peoples' that are coming forward somehow do get
15 incorporated into your hearing process. I understand
16 that's a possibly difficult task, but that is in fact
17 the task that you are charged with. If you're
18 interested in having the general public up here to
19 make comments, I think the general public would like
20 to see our comments being made a part of this process.

21 In the spirit that that may in fact take place, I'm
22 going to forge ahead by attempting to talk a little
23 bit here about tritium.

24 Just as one example of many radionuclides
25 that the general public remains at risk of being

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1 exposed to within the ingestion pathway -- that is
2 within 50-miles of any reactor -- here or in Japan or
3 anywhere that reactors operate in the world. The
4 reason that I focus on tritium I hope to make obvious,
5 but my first strong suggestion to NRC is that the
6 owners of Seabrook should be required by NRC to show
7 proof positive that leakages and emissions of nuclear
8 radionuclides, such as tritium, have been prevented
9 entirely into the atmosphere, into the air, into
10 groundwater -- in keeping with conclusions drawn from
11 the National Academies of Science BEIR VII Report --
12 that is the Biological Effects of Ionizing Radiation
13 that was released a couple of years ago -- that a
14 conclusion from that study can be made that there is
15 no threshold below which radiation is safe. And if
16 NRC were actually to enact their regulations based on
17 the National Academies' findings, that should mean
18 that nuclear plants -- atomic plants like Seabrook --
19 should not be emitting radionuclides.

20 Now, I'm focusing on tritium for good
21 reason. There was a study conducted in the state of
22 Massachusetts a number of years ago that focused on
23 the Deerfield River Valley and was eventually signed-
24 you off on by the State officials within the state
25 Department of Public Health for the state of

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1 Massachusetts that showed statistical significance for
2 things like certain cancers and Down's Syndrome in the
3 Deerfield River Valley -- which was close to the
4 Yankee Rowe plant before it closed. Apparently, those
5 findings of cancer were eventually linked to exposures
6 in the Deerfield River Valley to tritium.

7 I have in my possession a report that was
8 done by a group out in western Mass. -- the Citizens
9 Awareness Network -- that was involved in creating
10 that study that talks about three very important
11 effects of tritium -- it's carcinogenic, it's
12 mutagenic, and it's teratogenic. Teratogenic meaning
13 that it is possible that exposure to tritium will
14 cause genetic defects down the line. The other two, I
15 think, are self-explanatory.

16 The reason I'm bringing up tritium in
17 relation to Seabrook in particular -- it could be
18 Cesium-137, it could be Strontium-90 -- but here, word
19 has come down to me that the owners of Seabrook have
20 been boring test wells over the last -- in the recent
21 past -- apparently looking for traces of tritium. I
22 don't know whether the wells have been dug deeply
23 enough -- I don't know anything about the wells -- and
24 I don't know what's been found. I think that it
25 should be part of the public record to know if tritium

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1 is actually leaking from the reactor at Seabrook.
2 But, God save the people that are close to that
3 nuclear reactor if tritium gets in the groundwater and
4 travels. I think that the NRC should be holding, not
5 only Seabrook, but all reactors to account for their
6 releases of tritium.

7 And I'll say, finally, in relation to
8 tritium -- that it does us on planet earth no good if
9 we're using nuclear power as a way to bridge our
10 energy toward a carbon-free future, if by doing so
11 we've taken on this Faustian bargain of irradiating
12 the earth in the process.

13 The next thing I wanted to say is -- why
14 does the Nuclear Regulatory Commission not require
15 independent monitoring of radiation that allows
16 reactor community residents and first responders --
17 not only here, but all over the United States -- to
18 know the real-time direction, location and intensity
19 of radioactive plumes in the event of a radiological
20 event.

21 If that had been put in place 15-years ago
22 for reactors around the country -- such as Seabrook --
23 and the NRC was actually looking at that information
24 as a part of its evaluation of relicensing -- then the
25 NRC would have some strong data on which to base the

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1 actual safety of this plant. But, without that
2 information -- what do you really have for data as far
3 as the health and safety of the local environment, if
4 you don't actually know what radiation is being
5 emitted? So, that should be done not only here, but
6 that should be done all over the world.

7 I want to point out for those of you that
8 don't know that there's one group in this area -- the
9 C-10 Research and Education Foundation out of
10 Newburyport, Massachusetts -- that at this time has
11 the model independent monitoring system in the entire
12 United States and we have actually had visitors from
13 Fukushima come to C-10 because people all over the
14 world have suddenly become interested in how to
15 properly monitor for radiation.

16 My last two-items have to do with hardened
17 on-site storage of spent fuel. You should be
18 requiring hardened on-site storage as a prerequisite
19 for relicensing. I'm also curious to know -- and I
20 could just leave this as an open question -- if
21 there's any consideration being given to the potential
22 for inundation of coastal floodplains over the next
23 25-years? If you're considering relicensing at this
24 time, then you have to be considering inundation in
25 relation to global warming. Thank you.

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1 BRIAN ANDERSON: Chris -- thank you for
2 those comments. I'll check one more time. I believe
3 that Mary Lampert is not here in the room -- so the
4 next speaker would be Paul Gunter and after Paul --
5 Representative Peter Schmidt.

6 PAUL GUNTER: Thank you. My name is Paul
7 Gunter and I'm director of reactor oversight at Beyond
8 Nuclear out of Tacoma Park, Maryland. We are one of
9 the interveners in the Seabrook relicensing
10 proceeding. As I mentioned earlier, we've already had
11 a preliminary hearing before an Atomic Safety and
12 Licensing Board. Specifically, our contention has to
13 deal with the environmental alternative and the
14 requirement of the National Environment Policy Act for
15 Seabrook to consider the environmental alternatives
16 and the NRC to incorporate that in its decision for
17 licensing renewal.

18 When I read the Draft Environmental Impact
19 Statement, I note that within 54-lines the NRC is able
20 to dismiss the alternative of wind power in the region
21 of interest. What this says to me is that the Agency
22 -- particularly the staff in its review -- did not
23 look at the documentation that was presented to -- in
24 a persuasive argument to even your own Atomic Safety
25 and Licensing Board -- enough for you to incorporate a

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1 whole host of documentation, which I'm going to
2 briefly go through here, as long as my time permits.
3 But it seems apparent that these concerns are falling
4 upon deaf ears with regard to the Agency's
5 consideration.

6 Within 54-lines, basically you say that --
7 the wind energy alternative is intermittent and not
8 feasible in terms of baseload power -- and that -- its
9 availability, its accessibility and its consistency is
10 not of a standard for addressing the environmental
11 impacts that are forced upon us by the continued
12 operation of the Seabrook plant.

13 In fact, what this does -- the statement
14 of fact -- as your Draft Environmental Impact
15 Statement reads -- basically takes a page out of the
16 Environmental Report of the applicant in that your
17 perspective is a review of the alternative at this
18 time. I think that that's disingenuous when we're
19 talking about not issuing a relicense application
20 tomorrow or even 10-years from now, but 20-years from
21 now -- approximately -- we're talking about this time
22 frame.

23 In fact, what it does is serve to
24 obfuscate a whole host of expert documentation,
25 Memorandums Of Understanding and basically -- as we

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1 have contended, as your Draft Environmental Impact
2 Statement reinforces -- that the NRC is not following
3 the requirements under the National Environment Impact
4 Statement [sic] that you must honestly acknowledge and
5 be sufficiently complete in your review.

6 Let me just read a couple of these as time
7 would permit me. When you talk about that it's not a
8 reliable baseload power source -- what you do is that
9 you've ignored Exhibit Number-4 in our intervention,
10 which is entitled -- *Supplying Baseload Power and*
11 *Reducing Transmission Requirements by Interconnected*
12 *Wind Farms* -- from the Journal of Applied Meteorology
13 and Climatology, which was prepared by Stanford
14 University. This scientific manuscript concludes --
15 contrary to common knowledge -- an average of 33% and
16 a maximum of 47% of yearly averaged wind power from
17 interconnected wind farms can be used as reliable
18 baseload electrical power. Equally significant --
19 interconnecting multiple wind farms to a common point
20 and then connecting that point to a faraway city can
21 allow for the long-distance portion of transmission
22 capacity to be reduced, for example, by 20% with only
23 1.6% loss of energy. Nowhere in your evaluation do
24 you acknowledge the expert opinion that already in
25 this day and age -- the baseload promise, the baseload

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1 capacity is in fact clearly feasible.

2 There are an increasing number of news
3 accounts and current events that reveal that there is
4 in fact this building of momentum for baseload power.

5 For example, you do not mention in your Environmental
6 Impact Statement that Google Corporation has already
7 invested \$5 billion of its money to lay the first
8 vertebrae of a backbone of offshore wind transmission
9 from Virginia to Maine. So, your dismissal of this
10 power source as a baseload power for the license
11 period of 2030-2050 -- I think, again, it demonstrates
12 a disingenuous approach to looking at the
13 environmental impact issue.

14 A few more examples here. The potential
15 here is just tremendous. There are now (9) European
16 North Sea countries -- Germany, France, Belgium,
17 Denmark, Sweden, Norway, Great Britain and the
18 Netherlands -- that have announced an investment of
19 \$40 billion in an offshore, undersea, energy super-
20 smart grid, which basically is dedicated to the
21 transmission of renewable energy. This investment and
22 development supports a model for the United States,
23 which your own Draft Environmental Impact Statement
24 ignores. I mean, we can go on.

25 The University of Delaware and Stony Brook

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1 University study -- they did a study that says that
2 based on a five-year wind data from (11)
3 meteorological stations distributed over a 2,500 km
4 extent along the U.S. Eastern Seaboard -- power output
5 for each hour of the site is calculated and in short
6 that -- there is evidence that the wind blows all the
7 time somewhere and if interconnected along a
8 transmission line you have a demonstrated baseload.

9 But since I'm about to be cut short here,
10 I just want to also note that what you've ignored are
11 Memorandums Of Understanding, bids that are now going
12 on with the state of Maine. By 2030 -- so by the time
13 you're talking about this license renewal to take
14 effect in this federal action that you're looking at -
15 - the state of Maine is looking at having 5 gigawatts
16 of wind in the offshore waters -- 10 to 50-miles out
17 into the Gulf of Maine. That's the equivalent of (5)
18 Seabrooks. And again, there's no mention of this in
19 your Environmental Impact Statement review.

20 I don't think that that's an honest
21 evaluation. I think that what it does is it does not
22 build public confidence that this Agency is doing
23 nothing more than just promoting this industry.
24 That's not your job, particularly when we now know
25 that Seabrook -- what it forces upon us are these

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1 environmental consequences that require emergency
2 planning zones -- out to 50-miles -- enhanced security
3 because of the environmental threat that putting these
4 reactors in our communities is all about and the
5 alternatives clearly don't represent that level of
6 threat. And you've ignored this.

7 BRIAN ANDERSON: Paul -- thank you for
8 those comments. Representative Schmidt and then we'll
9 hear from Paul Blanch.

10 REP.PETER SCHMIDT: Thank you. I'm Peter
11 Schmidt. I represent Dover, Wards 1 and 2. I am not
12 a scientist -- and not even to say a nuclear scientist
13 -- and I don't speak as a scientist, but rather as a
14 policymaker. I've been in the legislature now for
15 nearly 9-years and I was 3-years as a Dover City
16 Council before that, so what I am in the business of
17 is judgment with regard to policy.

18 I would have to say that just -- before I
19 begin my more pertinent remarks -- that what Paul has
20 just referred to, but also the questions with regard
21 to contacting the public -- demonstrate either a
22 somewhat willful disregard of some of the facts, which
23 one could possibly attribute to somewhat of a silo-
24 type of thinking -- you're focused on your specific
25 bailiwick and not looking in the wider thing --

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1 perhaps disregarding the information which Paul eluded
2 to.

3 But with regard to trying to get the
4 public to be informed -- the bottom line here is if
5 you asked virtually any resident of the seacoast,
6 certainly the elected representatives, with regard to
7 contacting the public in this area -- I think they
8 would've said that some of the publications you
9 referenced would be useful, but by no means sufficient
10 -- ads in the Union Leader, Portsmouth Herald, the
11 Dover Foster's Daily Democrat and other more widely
12 circulated papers would certainly have gotten you a
13 lot more feedback from a much wider area, which is
14 perhaps not within the evacuation zone, but would
15 definitely be impacted by the relicensing of Seabrook.

16 I don't try to address the scientific
17 aspects of this issue. I'd like to look at the larger
18 picture because the fact of the matter is -- my
19 greatest concern is not the possibility of terrorism
20 or environmental disaster -- I think those are all
21 much more on your mind and possibly more predictable.

22 But, if I mention such things as Fukushima or Three-
23 Mile Island or Chernobyl, or the Titanic disaster, for
24 that matter -- I don't do so in order to create an
25 alarmist sentiment, but rather because they

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1 demonstrate the fallibility of human design concepts,
2 but also the unpredictability of future events.

3 And certainly, just in the last 10-years,
4 we've seen Fukushima, we've seen the Twin-Towers and
5 September 11th. And those things demonstrate that
6 we're not very good at predicting the future. That
7 there are all types of things that are happening and
8 one of the concerns that we certainly have is global
9 warming. Seabrook is very close to the ocean,
10 obviously. I'm wondering -- we read recently, for
11 example, that several nuclear power plants along the
12 Missouri River were essentially isolated and may have
13 experienced some flooding -- we're very concerned in
14 this area what that type of thing might generate.

15 My primary concern here is that we are
16 engaged in the relicensing process way too far in the
17 future. I just cannot believe that it is appropriate
18 to relicense Seabrook at this time when the current
19 license is not even remotely ready to expire. What do
20 we really know about what the situation is going to
21 be. Some of the aspects have eluded to -- the
22 possibility of degradation of the plant's
23 infrastructure -- but all these other aspects, which
24 I've just very briefly touched on -- suggest to me
25 that this is -- a relicensing of Seabrook at this time

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1 -- is incredibly premature given all the things that
2 we absolutely know are potential problems: a terrorist
3 act, the storage aspect, the sea level rise and those
4 types of things. Those are the types of things that
5 we already have some knowledge of even if we can't
6 predict exactly how they will manifest themselves over
7 the next 10 to 20-years. But, certainly, the idea of
8 committing this region to this ongoing operation of
9 this plant -- when we're not even close to the
10 expiration of the current license -- strikes me as
11 very, very concerning.

12 So, that is my gravest concern -- that we
13 are jumping off the bridge or jumping off the ship
14 before it's even beginning to founder. And committing
15 ourselves to a situation that I think is questionable,
16 if not unwise. And I'll leave it at that. You get
17 the message, but to the degree that you're engaged in
18 either an active promotion of the nuclear industry,
19 regardless of all of the facts and regardless of
20 whether the public is in support of that, or whether
21 there are real alternatives -- and I have seen the
22 presentation that Paul alluded to in his remarks with
23 regard to the potential for offshore wind.

24 This is not some pie in the sky -- this
25 process is already very far along and it's making

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1 rapid progress. Jumping onto the Seabrook life-raft
2 at this particular point, I think is, as I say,
3 extremely questionable. I hope that you will exercise
4 your authority to weigh the alternatives and the
5 question of -- when it is appropriate to relicense.
6 And I think the time is not yet now. Thank you.

7 BRIAN ANDERSON: Thank you, sir, for those
8 comments. The next speaker is Paul Blanch -- is Mr.
9 Blanch in the room? Is there anyone else named Paul
10 that registered to speak? Okay. The next speaker is
11 Thomas Saporito -- who I believe is on the phone. Mr.
12 Saporito -- can you hear me?

13 THOMAS SAPORITO: Yeah. Can you hear me?

14 BRIAN ANDERSON: I can hear you. I'm
15 going to try and place a microphone near the
16 speakerphone to see if that'll better allow everyone
17 else in the room to hear you. When you're ready to
18 make your comments -- it's your time.

19 THOMAS SAPORITO: Can you hear me now?
20 Can the court reporter hear me?

21 BRIAN ANDERSON: Yes, he can. You are on
22 the record.

23 THOMAS SAPORITO: Okay. First of all, my
24 name is Thomas Saporito. I am the senior consultant
25 with Sapordani Associates and we're located in

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1 Jupiter, Florida. I have (4) points that I want to
2 address to the NRC with respect to this relicensing
3 issue.

4 However, before I get into that, I just
5 want to follow-up on the prior speaker's comments on
6 the NRC being premature in their endeavor to relicense
7 this nuclear plant so far in advance.

8 It's my perspective, after monitoring the
9 NRC for some 25-years, that the NRC is involved in a
10 process of rubberstamping these 20-year license
11 extensions to nuclear power plants that were only
12 originally licensed to operate safely for 40-years.
13 The NRC is aggressively rubberstamping these licenses
14 because there are Senators and Congressmen who are
15 actively trying to put a moratorium on relicensing
16 nuclear power plants. So, now there is a race between
17 Congress and the Nuclear Regulatory Commission with
18 respect to this issue. So, that's the heart of it all
19 right there. It's not the fact that the NRC's trying
20 to protect public health and safety in this instance.

21 In this instance, the NRC is in a footrace trying to
22 rubberstamp these licenses without due process.

23 With respect to this specific plant and
24 the relicensing issue here -- the NRC appears to have
25 failed in its Environmental Review to consider the

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1 brittleness of the metal that comprises the reactor
2 vessel. The Associated Press recently did a year-long
3 investigation of the NRC and found the NRC to be
4 complacent and found that these nuclear power plants
5 were only licensed to safely operate for 40-years.
6 The Associated Press investigation confirmed that the
7 Agency is rubberstamping these license extensions at
8 the peril of public health and safety.

9 So, I would encourage and request that the
10 NRC require the licensee -- NextEra Energy -- to do
11 destructive testing analysis of the metal which
12 comprises the nuclear reactor vessel, to ascertain the
13 exact degree of imbrittelment that may currently exist
14 in that reactor vessel. Because if that reactor
15 vessel cracks from the neutrons that are bombarding it
16 -- you're going to have a loss of coolant accident
17 that you could not recover from and you'd be melting
18 down, just like the reactors in Japan. Once you do
19 that analysis, then you can prorate that and see if
20 that reactor vessel's going to crack if the license is
21 extended 20-years beyond its 40-year license.

22 The next issue would be the alternatives.

23 The NRC's Environmental Review and report is a joke
24 on the alternatives. First of all, if the NRC would
25 simply -- in their review -- have considered

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1 installation of on-demand electric water heaters for
2 all the customers of NextEra Energy, you would reduce
3 the grid's electrical load demand by 50 to 70% with
4 the installation of just that one appliance. If you
5 add solar systems to the customers of NextEra Energy -
6 - you would have a zero footprint. You would actually
7 -- those customers would actually be putting power
8 into the grid and you wouldn't even need Seabrook.
9 You would have surplus power with those two
10 initiatives. You wouldn't need Seabrook to operate at
11 all.

12 And that's required. Those analyses are
13 required by the Agency to be part of their
14 Environmental Report. I don't see it in there. And
15 these are realistic, real-time -- if you go to our web
16 site saporito-associates.com -- there's a hyphen
17 between those two words -- you will see the evidence
18 where those systems are already in place for many
19 years -- they're not something new. This has been
20 going on for years.

21 The next issue would be earthquakes. The
22 NRC Environmental Report should have required the
23 licensee to do a new seismic evaluation of the
24 Seabrook facility. Just as recent as August the 23rd
25 of this year, the North Anna Nuclear Power Plant

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1 experienced a seismic event outside its design basis.

2 Okay? Outside its design basis. So, the NRC granted
3 North Anna a license and had an earthquake event
4 happen outside its design basis. Who's to say that
5 there's not going to be a seismic event that's going
6 to be outside the design basis of the Seabrook plant?

7 That's something that's supposed to be in the NRC's
8 Environmental Report and I don't think it's
9 sufficiently in there -- if it's in there at all.

10 The final item I want to address to the
11 NRC is with respect to the environmental consequences
12 of the NRC's action allowing this nuclear plant to
13 operate for 20 more years. It's going to adversely
14 affect the environment because it's going to introduce
15 millions and millions of BTUs worth of heat that would
16 not otherwise be introduced into the environment
17 because the reactor -- the fuel in the nuclear reactor
18 core has to continuously be cooled by water and that
19 heat is dumped into the environment. If that nuclear
20 plant wasn't operating for 20 more years, you wouldn't
21 have 20 more years of heat being dumped into the
22 environment that wasn't there before. That all
23 contributes to global warming. Okay? You may have a
24 near zero carbon footprint with nuclear power
25 production, but you damn sure have a lot of heat being

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1 unnecessarily put into the environment.

2 So, these issues I would hope and urge the
3 NRC to take seriously and to incorporate them into
4 their Environmental Report and I would hope that the
5 interveners in the current licensing proceeding are
6 addressing these issues, as well. Thank you very
7 much.

8 BRIAN ANDERSON: Thank you, sir, for those
9 comments. Thank you for joining us by phone and thank
10 you for your comments. The next speaker is Ben
11 Chichester -- did I say that even close to right?
12 After Ben -- Randall Kezar.

13 BEN CHICHESTER: Chichester.

14 BRIAN ANDERSON: Chichester -- Ben
15 Chichester.

16 BEN CHICHESTER: Good evening staff of the
17 NRC. We know that this meaning is a farce coming in
18 here because we've been through this with you guys
19 plenty of times before. We know it's a feel-good
20 thing and a technicality for you to have to go through
21 this public hearing.

22 UNIDENTIFIED AUDIENCE MEMBER: Please
23 speak into the mic.

24 BEN CHICHESTER: This is a public hearing,
25 but it is a farce and we know that coming in here.

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1 It's a farce I say because if it wasn't a farce then
2 we wouldn't be having to address so many ridiculous
3 considerations that you are pretending are something
4 that is manageable and real. I can mention a few, but
5 one of the things that comes to mind is the Evacuation
6 Calendar that is sent out to us on a regular basis.
7 It tells us where to go if there's a nuclear problem.

8 But, everybody knows that you don't go where the wind
9 is blowing and there's no accounting for that in the
10 Evacuation Calendar.

11 Initially, we were told we were going to
12 not have a power plant if you couldn't have an
13 evacuation plan that was workable. But then we were
14 told that it was enough just to have an evacuation
15 plan -- it didn't have to work. That's one example of
16 the kind of farcical nature of this meeting.

17 There are too many things that you are not
18 considering. We live in a world where the health of
19 our economy and the very functioning of an economy is
20 at risk from day to day from total breakdown. Where
21 is the money going to come to pay for and who is going
22 to be in charge of paying for the costly work of
23 maintaining and protecting the citizens from spent
24 fuel pools? Who's going to pay when the seawater
25 rises from global warming and we have popping sounds

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1 with explosive plumes coming from Seabrook? Who's
2 going to pay? Where's that money coming from?

3 We've already heard testimony here that
4 several plants were perilously close to flooding out
5 West and there is no assurance that this is not going
6 to happen here. But you can come into our town and
7 tell us that there is no safety impact 20 to 40-years
8 down the road from this plant. All this period of
9 time that you are proposing to extend this license --
10 the waste will be building up in and on the site.
11 That's a new uncharted territory because I don't
12 believe you know how to take care of that much waste
13 in one spot. You've never done it.

14 I think that there's an inherent collusion
15 between the industry and the NRC. I've heard that the
16 NRC gets most of its funding from the industry. This
17 may or may not be true.

18 PAUL GUNTER: 90%.

19 BEN CHICHESTER: How can you say that
20 we're going to be safe from terrorist attacks on the
21 plant either from foreign or domestic sources? The
22 Price Anderson Act says that the industry doesn't have
23 to pay very much in the event of a catastrophic
24 accident, but our government really can't afford to
25 pay for it either. So, it seems like we're going to

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1 be stuck there.

2 You're only thinking about 20-years at a
3 time, but we should be thinking like the Native
4 Americans think -- which would be more like seven-
5 generations ahead. 20-years is sort of a selfish way
6 of looking at what we're doing with these nuclear
7 plants. We should be looking down the road so that we
8 can ensure life on this planet will go on for a long
9 time.

10 We have companies like Westinghouse and
11 General Electric -- we're told that they bring good
12 things to life. You boys are here and you're the
13 functioning arm of these corporations -- the
14 rubberstampers -- that allow this pollution to be
15 created. We are tired of the corporations -- the
16 mafia -- the corporate nuclear mafia -- controlling
17 our lives here on the seacoast with your nuclear
18 plants forced on us above and beyond our local votes.

19 I know we're supposed to be here debating
20 whether or not it's going to be more prudent to have a
21 nuclear plant as opposed to some other form of energy,
22 but I can just tell you that the nuclear plants are
23 highly energy intensive to make them and to run them.

24 So, there's a lot of carbon involved in that process
25 -- global warming will increase. But the alternatives

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1 and the renewables -- which we've already heard
2 testimony -- are coming really fast and you can't tell
3 me today that they can't take the place of this
4 nuclear power plant 20-years down the line. And here
5 you are 20-years ahead of time looking for extended
6 license for your corporations that are making the
7 money.

8 Have you ever heard of an internal
9 emitter? That's a little piece of plutonium or
10 strontium that comes from these plants that can make
11 its way into the food chain and all it takes is a
12 little speck of it to be ingested to get cancer. So,
13 you're making tons of this product that nobody has an
14 answer for it. And it's happening all over the planet
15 really -- we've got to stop. We've got to stop making
16 nuclear waste because the waste has turned into
17 nuclear bombs and it's a dirty process from the mining
18 of the uranium, all the way through. It's the same
19 corporations that give us nuclear power that gives us
20 nuclear weapons. And it was all given to us secretly.

21 And then we were told it was great by little
22 documentaries they teach to school children. So, we
23 know what we're doing here tonight. And we know who
24 we are up against. I would just hope that we can get
25 real and see what we're doing -- see what we're doing

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1 to this planet. And try to do things better. And try
2 to be truthful about what's going on. Thank you.

3 BRIAN ANDERSON: Thank you, Ben. Next
4 speaker is Randall -- is that Kezar?

5 RANDALL KEZAR: I'll submit a written
6 [indiscernible].

7 BRIAN ANDERSON: Okay. So, Randall, I
8 understand that you don't want to speak tonight, but
9 you're going to provide written comments at a later
10 time?

11 RANDALL: Yes.

12 BRIAN ANDERSON: Okay. Thank you. The
13 next speaker is Robin Willits and after Robin -- Ilse
14 Andrews.

15 ROBIN WILLITS: I will be very brief. I
16 just want to add to what's been said. I have never
17 heard who benefits from continuing the plant another
18 20-years. Is there any public benefit? And I think I
19 can think of reasons that there might be benefits to
20 the corporation, but I want to know why the NRC is
21 supporting extension without defining what is the
22 benefit to the public.

23 BRIAN ANDERSON: Thank you, Robin. Ilse -
24 -

25 ILSE ANDREWS: Thank you. Good evening.

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1 I've lived a long life. Very early in my life I spent
2 years in air-raid shelters in Europe. Life does not
3 become much more dangerous. When I drive past
4 Seabrook, I consider it nothing more than an ominous
5 presence. I see nothing friendly or beneficial about
6 it. And I cannot understand why there is an effort to
7 prolong it, when we have viable and -- if there's such
8 a word as -- provable alternatives.

9 I'm standing here only because of my
10 concern for future generations. It makes my hair
11 stand on end when I read the phrase -- unavoidable
12 adverse impacts with regard to Seabrook emissions.
13 And on the slides this evening, there was a remark
14 that said -- the NRC's response to Fukushima, among
15 other things -- is that here there is no imminent risk
16 to public health and safety. Imminent means right
17 now, not 20-years or 21-years hence.

18 All of what I'm saying leads to a sort of
19 rhetorical question -- if current NRC regulations
20 permit such unavoidable adverse impacts and on the
21 other hand you are admittedly responsible for
22 protecting our health and safety, then I would like to
23 ask you -- what are you doing to change these
24 regulations? Thank you.

25 BRIAN ANDERSON: Thank you, Ilse. The

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1 next speaker is Herbert Moyer and after Herbert --
2 Marcia Bowen.

3 HERBERT MOYER: Thank you. Herb Moyer --
4 I live in Exeter. I'm a teacher. I was teaching at
5 Winnacunnet when the plant first came online and we
6 teachers were told we had to stay with students to
7 evacuate through bus transportation in case of an
8 accident. Of course, we now know the drivers of the
9 buses have subsequently said they would not show up.
10 So, I don't know really what plans the utility has
11 actually made for evacuation in the case, admittedly -
12 - unlikely, but possible. I'm not sure you all admit
13 that it's possible there's a major accident at
14 Seabrook that would happen and students would have to
15 leave the area in some manner in order to avoid
16 significant exposure.

17 But my question is and my comment is that
18 in 2049 -- what kind of changes to the transportation
19 network might we have encountered or done or clogged-
20 up highways or increased in numbers of housing, so
21 that we might not be able to realistically get people
22 out of an area -- in the case of a crowded summer day
23 at Hampton Beach? So, I'm wondering -- are you taking
24 into account the increased construction, population
25 increase and whether or not roadways would be able to

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1 capably handle evacuation if an accident were to occur
2 in 2049 -- a year before the projected end of this
3 theoretical license extension? So, that's what I'd
4 like to know.

5 I also would like to know -- it's probably
6 not germane to the relicensing but -- Chernobyl cost
7 the Soviet Union \$360 billion. Fukushima has cost
8 \$200 billion. The Price Anderson Act puts the
9 utilities on the hook for \$12 billion right now in
10 some sort of an escrow account. And we the taxpayers
11 would be liable for any damages to property, land,
12 animals, farms, properties, etc., beyond that. So I'd
13 like to know where that \$12 billion resides now and is
14 that even something one could count on if some sort of
15 accident occurs -- serious accident? Thank you.

16 BRIAN ANDERSON: Thank you, sir, for those
17 comments.

18 The next speaker is Marcia Bowen --

19 MARCIA BOWEN: I'm going to decline my
20 opportunity to speak tonight.

21 BRIAN ANDERSON: Okay. Thank you, Marcia.

22 And the last speaker that I have here is Doug Bogen.

23 DOUG BOGEN: If you don't mind, I want to
24 wait until they find a new battery for the camera
25 there.

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1 My name's Doug Bogen. I'm Executive
2 Director of the Seacoast Anti-Pollution League based
3 in Exeter, New Hampshire. I would like to make some
4 kind of general comments and have a few specific ones,
5 as well, about the Draft report. I will try to make
6 different comments than what I made in the earlier
7 session this afternoon, but I think they're no less
8 pertinent and important.

9 As others have suggested tonight, the
10 world has changed since Fukushima. Just as it changed
11 after Three-Mile Island. Just as after Chernobyl.
12 Yet, everything I read in this Environmental Statement
13 seems to indicate that it's business as usual at the
14 NRC. I don't see any change of perspective. I don't
15 see any greater consideration of the public interest.

16 As we've heard from others, this just seems to be
17 business as usual. It's the same old story. Same
18 dismissal of alternatives -- they don't seem to have
19 learned anything.

20 I should mention, for the record, we are
21 one of the interveners along with Beyond Nuclear, New
22 Hampshire Sierra Club and other groups. Our
23 intervention is based on the National Environmental
24 Policy Act, but we don't get the sense that the
25 writers of this report have picked up anything from

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1 what we've submitted. Even though these are many peer
2 reviewed studies, on-the-ground actual projects -- but
3 they don't seem to find their way into the report.

4 The facts are that you have zero actual
5 experience with commercial reactors older than 42-
6 years old. I looked it up. I don't think there's one
7 in this country that's older. In fact, in the whole
8 world, I don't believe there are any reactors that
9 made it to 50-years. So, you have no experience with
10 real-world impacts on the environment past that age.
11 What we do know is that younger reactors have leaked
12 huge quantities of tritium into the groundwater --
13 Seabrook among them. Seabrook was only nine-years old
14 when it started leaking tritium back in '99. For 12-
15 years now, they've been pumping the groundwater.
16 Pumping out the leaking water just to put it out into
17 the ocean to dilute it. That doesn't sound like a
18 solution. That sounds like pump and dilute and just
19 pushing the issue further offshore.

20 Younger reactors -- including Seabrook --
21 have had chronic problems with the emergency diesel
22 generators. This has certainly been seen as a greater
23 concern after Fukushima and what happened with theirs
24 and the need to be able to respond to difficult
25 situations -- natural disasters, unnatural disasters.

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1 Younger reactors have had critical safety structures
2 corroded almost to the point of failure.

3 This was recently covered in an AP series
4 and it ran in the local papers here, as well as around
5 the country. Younger reactors have ended their useful
6 lives prior to reaching 40-years old and there have
7 been, I think, at least two-dozen reactors around the
8 country that didn't make it to 40, but everyone of
9 them are still storing their spent fuel on-site in
10 vulnerable areas. Just in our neighborhood, we've got
11 Maine Yankee, Yankee Rowe, Connecticut Yankee, Haddam
12 Neck -- that are all just waiting for some day that
13 fuel is going to be put somewhere else. This is the
14 record. This is the legacy that we leave to future
15 generations. This is what you have as real-life
16 experience.

17 Another point -- just looking at the power
18 needs. There keeps being this reference to the need
19 for power -- I want to know where it's written that we
20 will always need 1,250 megawatts on the New Hampshire
21 seacoast, when it isn't even used on the New Hampshire
22 seacoast or even in New Hampshire at all. We have
23 more than enough energy -- more than enough electrical
24 power in New Hampshire, even without Seabrook. I
25 don't think that corporation was given an unlimited

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1 life -- perpetual power generation -- permission. We
2 need to stop thinking that once they build it, it'll
3 always be there.

4 In your comments tonight and in the report
5 itself -- page 8-42, you say that -- assuming that a
6 need currently exists for the power -- but we're not
7 talking about current need, we're talking about need
8 decades into the future -- 20, 30, 40-years. So, what
9 does current power use have to do with it? It just
10 seems like we're just sort of saying -- Well, this is
11 the way it is today and this is the way it's going to
12 be 30-years from now. That just doesn't make any
13 sense. It doesn't pass the laugh test. I would
14 suggest that you at least amend that to say --
15 assuming that a need will exist in 2030. That would
16 be at least a little bit more accurate, a little more
17 appropriate to the report. That should be the issue
18 here.

19 I'll say a little bit about tritium. I
20 did talk about it earlier tonight, but first off I
21 want to say it's in a few different sections in the
22 report. It's kind of hard to find out where all the
23 tritium information is. I understand that you're
24 referring to it as a kind of a new issue. Although,
25 again, it's been ongoing for at least a dozen years.

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1 One of the sections that talks about the other de-
2 watering doesn't mention this new de-watering -- the
3 32,000 gallons per day -- in the Unit 2 foundation.

4 What is the total amount and why is this
5 considered acceptable? Do you expect it's going to
6 continue? Is it going to increase? Where are we at
7 with the water there? Why can't they stop the leaks?

8 That sounds like an awful lot of water to be putting
9 out into the ocean. I understand that the EPA
10 regulation allows 20,000 picocuries per liter of
11 tritium in drinking water -- or that's the limit --
12 but that doesn't mean that something under that is
13 perfectly safe. In fact, many other countries have
14 much stricter standards.

15 My understanding is the state of
16 California and the state of Colorado -- that would be
17 completely unacceptable. They've set standards more I
18 think around 500 or 400 picocuries per liter. You
19 state in one part of the document that the levels of
20 tritium in seawater were under 3,000 picocuries per
21 liter. I understand in salt water you can't test as
22 low as you can in freshwater, but if they're at 2,999
23 that again does not make it safe. That's still
24 somewhere in 100 times greater than background levels
25 for tritium. Natural occurring tritium is in the

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1 single digits -- maybe up to double digits.

2 So, even the EPA standard -- we're talking
3 1000 times more than the ambient levels in our
4 environment. That just doesn't make sense. It
5 doesn't sound safe to me. We all know now that there
6 are no safe levels of radiation and I don't know how
7 you can continue this idea that that's an acceptable
8 level, when many other countries much of the science
9 shows that's not enough.

10 So, I want to move on to some of the
11 carbon emissions. I talked a bit about this earlier,
12 but I did want to point out, as well, that again as
13 Mr. Gunter emphasized -- it doesn't seem like you
14 picked up much from the materials that we submitted in
15 our intervention petition. The cited studies that you
16 list comparing carbon emissions from nuclear versus
17 carbon from other renewable energy sources -- just
18 about everyone of those studies appears to be from the
19 International Atomic Energy Association, which we all
20 know has the double-purpose of both promoting and
21 regulating nuclear power. So, I would suggest it
22 might be a little bit biased.

23 Why aren't there more independent studies?
24 One in particular that we referred to in our petition
25 from a researcher named Sovacool in 2008 -- that was a

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1 broad survey of previous existing studies. He
2 concluded that nuclear power emits seven times more
3 carbon dioxide than wind for a new plant. I believe
4 it's five times more for an existing plant. Indeed,
5 in your own information regarding Seabrook, you
6 mentioned an average over five-years -- 24,000 tons of
7 carbon dioxide equivalent released just on-site.
8 That's not including the fuel, the transportation,
9 construction and so forth. That's just on-site each
10 year.

11 Just to put that in perspective, which
12 would be helpful in your report -- that's about 10% of
13 the carbon emissions of one of the Schiller boilers --
14 the 15-megawatt boiler -- the Schiller Plant being in
15 Portsmouth, New Hampshire -- just up the road. It's
16 the equivalent -- the plant owners love to say how
17 many homes they can provide power to with their plant
18 -- well, the carbon emissions from Seabrook alone on-
19 site are the equivalent of the carbon emissions from
20 over 3,000 homes -- just from their power use -- or
21 4,000 homes for their overall carbon footprints. I
22 think that's pretty significant. I think people would
23 be surprised to know that -- that Seabrook, in
24 particular, is not carbon-free, as is the whole
25 industry. So, we'd like to see a little bit better

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1 treatment of the relative impacts and of course that
2 influences your whole decision about which types of
3 power sources would be most environmentally sound.

4 We really have concern with the comparison
5 you make with the one you do look at -- the combined
6 cycle gas and wind power combined versus nuclear. I'm
7 just mystified why you chose to look at -- you
8 mentioned the idea of having five wind farms. Four of
9 which would be on land and one of which offshore.
10 Well, everything you've heard from other speakers
11 tonight and again in our petition shows that offshore
12 is the future. We don't need to be building as many
13 farms onshore. I understand that's where Florida
14 Power and Light -- the parent company of NextEra --
15 that's where they get their wind, where they're used
16 to using it.

17 But that doesn't mean that's going to be
18 the future. It just seems like an unfair comparison
19 and not really representative of future development.
20 So, I wonder whether you're just setting it up to
21 fail? That seems to be the way you present this. You
22 say that's the only potentially viable project, but
23 then you don't look at what would be the most
24 attractive -- the most environmentally sound approach
25 to that development. So, I would, if you can, I would

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1 like you to reconsider that choice -- take another
2 look at those comparisons.

3 I just have a few more points -- just
4 again talking about groundwater -- not so much the
5 tritium issue, but just the increases, particularly
6 under climate. I talked earlier about the sea level
7 impacts on the site. Clearly with the existing
8 infiltration of the foundations leading to the ASR
9 problem -- there ought to be some projection. I know
10 you make reference to some hydrological studies, but
11 it seems like again it deserves more than a sentence
12 or two about future infiltration. I think that's
13 something we all want to know about. That's an
14 environmental impact on the plant. Even though I know
15 it's supposed to be addressed in other reports.

16 So, again, I think all of these things are
17 worth consideration and I do hope that you will make
18 some changes in the final version of your report.
19 Thank you very much for your time.

20 BRIAN ANDERSON: Thank you, sir, for your
21 comments. Was there anybody that signed up to speak
22 tonight that I might have missed? I believe that
23 everybody that registered to speak has had a chance to
24 speak. Did I miss anybody?

25 Okay -- good. Thank you all again -- not

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1 just for providing your comments, but for taking time
2 out of your personal lives to come be at this meeting
3 to listen to the NRC staff and to share your thoughts
4 and provide your comments on the NRC's review. I
5 personally appreciate you taking the time to be here
6 and providing your comments. On behalf of the NRC
7 staff -- thank you for taking the time to be here.

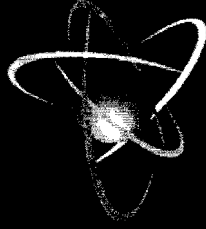
8 If you have any other questions or would
9 like to have any further discussion with NRC staff --
10 they will be available after this meeting. Like I
11 said earlier, this is not the only opportunity to
12 provide comments. The comment period remains open
13 through October 26th. There's opportunity to provide
14 written comments electronically or in the mail. So,
15 with that --thank you all again for your time and
16 please travel safely tonight. Have a great night.
17 This meeting's adjourned. Thank you.

18 (Whereupon, at 8:53 p.m., the public
19 meeting was closed.)
20
21
22
23
24
25

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Preliminary Site-Specific Results of the License Renewal Environmental Review For Seabrook Station



U.S. NRC

United States Nuclear Regulatory Commission

Protecting People and the Environment

September 15, 2011

Meeting Overview

- NRC presentation (25 minutes)
 - NRC's regulatory role
 - Summary of environmental review
 - Upcoming milestones and how to submit comments outside this meeting
 - Other topics
- Q&A's (25 minutes)
- Your comments (remaining time)

NRC's Regulatory Oversight

- NRC regulates civilian use of nuclear materials, including power plants
- NRC's mission:
 - Protect public health and safety
 - Promote common defense and security
 - Protect the environment

Environmental Review

- Generic Environmental Impact Statement addresses issues common to many or all plants
- Draft Supplemental Environmental Impact Statement addresses site-specific issues
- Review proposed action (license renewal) and alternatives

How Impacts are Quantified

- NRC-defined impact levels:
 - **SMALL** - Effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource.
 - **MODERATE** - Effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resource.
 - **LARGE** - Effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

Site-Specific Environmental Issues of Continued Operation

Issues	Impact	DSEIS Section
Land Use	SMALL	4.1
Air Quality	SMALL	4.2
Surface Water Resources	SMALL	4.3
Groundwater Resources	SMALL	4.4
Aquatic Resources	SMALL to LARGE	4.5
Terrestrial Resources	SMALL	4.6
Protected Species and Habitats	SMALL to LARGE	4.7
Human Health	SMALL	4.8
Socioeconomics	SMALL	4.9

Cumulative Impacts

- Overall impacts to environment including past, present, and likely future actions
- Preliminary findings
 - MODERATE to LARGE cumulative impacts on aquatic resources
 - SMALL cumulative impacts in all other areas

Alternatives

- Alternative energy sources analyzed
 - Natural gas-fired combined cycle units
 - New nuclear
 - Combination of alternatives (combined cycle gas-fired unit and wind power)
- No action alternative

Preliminary Conclusion

The environmental impacts of license renewal for Seabrook Station are not great enough to deny the option of license renewal.

Seabrook Environmental Review Milestones

Application Submitted	June 1, 2010
Notice of Intent - Scoping	July 20, 2010
Scoping Public Meeting	August 19, 2010
Scoping Period Ended	October 20, 2010
Scoping Summary Report	March 1, 2011
Draft SEIS	August 1, 2011
Draft SEIS Public Meeting	September 15, 2011
Draft SEIS Comments Due	October 26, 2011
Final SEIS (projected)	March 2012

Additional Information

- Environmental PM: **Michael Wentzel**
(800) 368-5642, Ext. 6459
Michael.wentzel@nrc.gov
- Safety PM: **Richard Plasse**
(800) 368-5642, Ext. 1427
Richard.plasse@nrc.gov
- The draft SEIS can be viewed at:
 - Seabrook Library, 25 Liberty Lane, Seabrook, NH 03874
 - Amesbury Public Library, 149 Main Street, Amesbury, MA 01913
- Online:

<http://www.nrc.gov/reactors/operating/licensing/renewal/applications/seabrook.html>

Submitting Comments After the Meeting

- By mail: Chief, Rules, Announcements
and Directives Branch
Division of Administrative Services
Mailstop TWB- 05B01M
U.S. NRC, Washington, DC 20555-0001
- Internet: www.regulation.gov, search on Docket
IDs: NRC-2010-0206

Comments due by October 26, 2011

Concrete Degradation

- Evidence of alkali-silica reaction (ASR) discovered at Seabrook during the license renewal process
- ASR occurs slowly over time and can cause expansion and cracking in concrete
- There are no immediate safety concerns associated with ASR at Seabrook
- License renewal safety review delayed
 - Until an adequate aging management program is provided

NRC Response to Fukushima

- The NRC's response to Fukushima is as a current operating issue
- Increased inspections at operating facilities
- NRC Near-Term Task Force issued its report on July 12, 2011
 - Continued operations and continued licensing activities do not pose an imminent risk to public health and safety
- Staff paper on prioritization of task force recommendations due October 3, 2011
- More information:
 - <http://www.nrc.gov/japan/japan-info.html>

Submitting Comments

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and Directives Branch
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accessible at <http://www.nrc.gov/reading-rm/adams.html>. The transcripts for the afternoon and evening meetings are listed under Accession Nos. ML11273A139, and ML11273A140, respectively. A copy of the slides used during the NRC's presentation is also available in ADAMS under Accession No. ML11259A002. Persons who do not have access to ADAMS, or who encounter problems in accessing the documents located in ADAMS, should contact the NRC's PDR reference staff by telephone at 1-800-397-4209, or 301-415-4737, or by e-mail at pdr.resource@nrc.gov.

The comment period for the Seabrook draft SEIS ends on October 26, 2011. The NRC staff will consider all comments on the Seabrook draft SEIS and make any necessary revisions to the document prior to issuing its final SEIS.

/RA/

Michael Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-443

Enclosures:
As stated

cc w/encls: Listserv

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ADAMS Accession Nos.:

1. Package: ML11277A233
2. Meeting Summary (w/encls. 1 & 2): ML11277A046
3. Afternoon Transcript (Corrected): ML11273A139
4. Evening Transcript (Corrected): ML11273A140
5. Slides: ML11259A002

*concurring via e-mail

OFFICE	LA:DLR:RPB2*	PM:DLR:RPB2	BC:DLR:RPB2	PM:DLR:RPB2
NAME	IKing	MWentzel	DWrona	MWentzel
DATE	10/13/11	10/17/11	10/26/11	10/26/11

OFFICIAL RECORD COPY

Memorandum to NextEra Energy Seabrook, LLC from M. Wentzel dated October 26, 2011

SUBJECT: SUMMARY OF PUBLIC MEETINGS CONDUCTED TO DISCUSS THE DRAFT
SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT RELATED TO
THE REVIEW OF THE SEABROOK STATION LICENSE RENEWAL
APPLICATION (TAC NO. ME3959)

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