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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

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WASTE CONFIDENCE DIRECTORATE

+ + + + +

WASTE CONFIDENCE DRAFT GENERIC ENVIRONMENTAL IMPACT
STATEMENT (DGEIS) AND PROPOSED RULE

PUBLIC MEETING

+ + + + +

TUESDAY,
OCTOBER 1, 2013

+ + + + +

The meeting was convened in the
Commissioners' Hearing Room, One White Flint North,
11545 Rockville Pike, Rockville, Maryland, at
2:00 p.m., Chip Cameron, Facilitator, presiding.

PRESENT:

- KEITH McCONNELL, Director, Waste Confidence
Directorate
- CARRIE SAFFORD, Deputy Director, Waste
Confidence Directorate
- TYSON CAMPBELL, Lead Counsel, Waste Confidence
Directorate

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PRESENT: (cont'd)

ANDY IMBODEN, Chief of Communications,

Planning and Rulemaking, Waste

Confidence Directorate

TIM McCARTIN, Senior Advisory for Performance

Assessment, Waste Confidence Directorate

PAUL MICHALAK, Branch Chief, Environmental

Impact Statement Branch, Waste

Confidence Directorate

NRC STAFF PRESENT:

MIRIAM JUCKETT

SARAH LOPAS

T.R. ROWE

SUSAN WITTICK

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

(2:01 p.m.)

MR. CAMERON: Good afternoon, everyone. My name is Chip Cameron, and I want to welcome you to the public meeting on the Nuclear Regulatory Commission's draft environmental impact statement and proposed rule on waste confidence. We will try to keep the acronyms down. The two that you will hear today are NRC and EIS.

We are having a little bit of trouble with the webcast. And you can access the webcast by typing in the address, and I'm going to give it to you now, and we are continuing to try to fix the webcast, so that you can just click on the link and get on.

The address is <http://video.nrc.gov>, and you'll be able to get into the webcast. And hopefully those of you who are on the phone have heard that.

And it's my pleasure to serve as your facilitator for today's meeting, and I'm going to be assisted by Miriam Juckett, who is over here, and Miriam is with the Center for Nuclear Waste Regulatory Analysis in San Antonio, Texas, and she is going to be helping me with the meeting today.

And in our roles as facilitators we are going to try to help all of you in the room and on the

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1 phones to have a productive meeting today.

2 I wanted to tell you a little bit about
3 the meeting process, so that you'll know what to
4 expect today. And I want to talk about the objectives
5 for the meeting, talk about the format for the
6 meeting, some simple ground rules to allow us to have
7 a constructive meeting today, and then I want to
8 introduce the NRC staff who will be either presenting
9 or answering questions today.

10 In terms of the objective for the
11 meeting -- it's fairly simple -- is the NRC staff
12 wants to listen to your comments and recommendations
13 on the draft EIS and proposed rule. And the staff is
14 then going to consider those comments as it prepares
15 the final environmental impact statement on waste
16 confidence.

17 The NRC is also taking written comments,
18 and I think the staff is going to tell you about how
19 to submit written comments. And I just want to
20 emphasize that the comments that you give today,
21 either in person or on the phone, they are going to
22 carry the same weight as written comments.

23 Format is also simple. We are going to
24 have two brief NRC presentations, and then we're going
25 to start the formal comment period. We will have

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1 time, a short period of time, to answer questions
2 about the process for the environmental impact
3 statement.

4 Now, as you probably know, at this
5 Rockville meeting we not only have people in the
6 audience who are going to give comments, but we have
7 people who are on the phone who are going to be
8 commenting also. And for those of you on the phone,
9 as Ana, the operator, just told you, if you want to
10 get in the queue to speak, just press star one.

11 For those of you in the room and on the
12 phones, I will be calling out the first three or four
13 people who are going to be next to comment, so that
14 will alert you to where you are in the lineup today.
15 And when I call you out to either come up to the
16 podium here or to address us by phone, just please
17 introduce yourself and give your affiliation, if
18 affiliation is appropriate.

19 And in terms of other ground rules, I
20 would just ask that only one person speak at a time.
21 We are taking a transcript of today's meeting, and we
22 have Matt Miller over here, who is our stenographer.
23 And one person at a time not only gives our full
24 attention to whomever has the floor at the moment, but
25 it also allows Matt to get what I call a clean

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1 transcript, so we know who is talking.

2 And that transcript will be your record of
3 the meeting. It will be NRC's record of the meeting.

4 I'm also asking you to be brief, so that
5 we -- in your comments, so that we get to all of the
6 people who are either here or on the phone who want to
7 talk today. We will be staying until we hear from all
8 of you. We are scheduled to go until 5:00, and
9 hopefully that will get all of you covered.

10 But I'm going to ask you to follow a
11 three-minute ground rule for your comments. And it
12 can be three to four minutes. There is some leeway
13 there. It's not going to be a strict three minutes,
14 but I apologize in advance if I have to ask anybody to
15 sum up or finish up so that we can go on to the next
16 person today.

17 Also, note that the NRC staff is not going
18 to be responding to anything that you say when you
19 give your comment. They are going to be carefully
20 listening, and they are going to be starting to keep
21 track of what the comments are. And those comments or
22 questions that you ask during your time for comment,
23 those will be addressed as the NRC prepares the final
24 environmental impact statement, and you will be able
25 to see how they answered your question or addressed

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1 your comment in that particular document.

2 In terms of questions generally, we do
3 have a few minutes, probably about 10 to 15 at the
4 most, to answer questions to make sure that you know
5 what the process is for this meeting today. Secondly,
6 so that you are clear on what the process is for
7 finalizing the environmental impact statement and
8 proposed rule. And, third, for answering any
9 questions that you may have, any clarifications about
10 the structure or organization of the environmental
11 impact statement.

12 So we will be going out to you in the
13 audience and on the phones for that short question
14 period. And for those of you in the room, Miriam is
15 going to be trying to cover people in the back part of
16 the room who might have questions. And I will do that
17 up in the front.

18 And I should say that at least for those
19 who are here in person in Rockville -- and we've had
20 an open house, an exhibit area over in the second
21 White Flint building -- we are going to have NRC staff
22 over there throughout this meeting. If you have a
23 substantive question, a question on the substance of
24 anything that is in the environmental impact statement
25 or the proposed rule, please go over and see those

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1 people and ask the question.

2 We are also going to use that model when
3 we are out at the regional meetings, which the staff
4 will tell you about. None of the comments that were
5 made, the discussions that were made at the open house
6 today, or the questions that you might ask in person
7 here, or anything that you ask over at the open house
8 area during the meeting, those are not going to be
9 considered formal comments.

10 So that if you want to get that on the
11 record, please submit that in writing or during your
12 comment time today, and it will be on the record.

13 Okay. I just would thank you all for
14 being on the phone and in person here today. And what
15 I'd like to do next is to introduce the NRC staff who
16 are front and center here today. And I'm going to
17 give you a biography on each of them, so that you know
18 about them and what their areas of expertise are.

19 And after that, we are going to go to
20 Keith McConnell, who is the Director of the Waste
21 Confidence Directorate here at the NRC, and to Andy
22 Imboden, who is the Branch Chief for Communications at
23 the Waste Confidence Directorate. We are going to go
24 to them for some comments, we'll do our short question
25 and answer period, and then we're going to start with

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1 the formal comments.

2 Before I go to the biographies of the NRC
3 staff, I want to give a well-deserved thank you to
4 T.R. Rowe and Susan Wittick who have just done a
5 marvelous job on all of the complicated logistical
6 arrangements for all of these meetings, and many other
7 things for the Waste Confidence Directorate.

8 In terms of biography, Dr. Keith McConnell
9 is the Director, as I mentioned, of the Waste
10 Confidence Directorate. And Keith came to the NRC in
11 1986 as a geologist and project manager in our Office
12 of Nuclear Materials Safety and Safeguards. And since
13 that time, he has had various positions with
14 Commissioners for the NRC.

15 For example, he was the technical
16 assistant to former Commission -- former Chairman
17 Selin. He was the senior materials technical
18 assistant to former Chairman Meserve and the technical
19 assistant and the executive assistant to Chairman
20 Diaz.

21 And Keith joined the Senior Executive
22 Service, the Government Management Service, in 2004,
23 and he was selected as the Director of the
24 Commission's adjudicatory technical support program.
25 That was in the Office of General Counsel. And prior

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1 to becoming the Director of the Waste Confidence
2 Directorate, Dr. McConnell served as the Deputy
3 Director of the Decommissioning and Uranium Recovery
4 Directorate in the Office of Federal and State
5 Materials and Environmental Management Programs.

6 In terms of educational background, he has
7 a bachelor's degree in geology from Clemson
8 University, a master's degree in geological sciences
9 from the Virginia Polytechnic Institute, and a Ph.D.
10 in geological sciences from the University of South
11 Carolina.

12 And the Deputy Director of the Waste
13 Confidence Directorate is Ms. Carrie Safford, who is
14 right here. And Carrie came to the NRC as an attorney
15 in the Materials Litigation and Enforcement Division
16 in the Office of General Counsel. That was in 2008.

17 And she has served as the Deputy Assistant
18 General Counsel of the Materials Litigation Division.
19 And prior to joining the NRC, Carrie served as the in-
20 house regulatory counsel to the Mirant Corporation as
21 energy regulatory counsel.

22 Her educational background is a bachelor's
23 in biology and geology from the University of
24 Rochester, and a Juris Doctor, a J.D., from the Pace
25 University School of Law.

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1 Now we will go to the branch chiefs in the
2 Waste Confidence Directorate. And Andy Imboden, who
3 is going to be talking to you in a minute, is the
4 Chief of Communications, Planning, and Rulemaking in
5 the Waste Confidence Directorate. He came to the NRC
6 in 2004 and has increasing responsibility in terms of
7 regulating nuclear reactors and nuclear materials.

8 He served on the staff of the Executive
9 Director for Operations, known as the EDO office, and
10 then he had positions as technical assistants for
11 former Chairman Jaczko, policy advisor to Chairman
12 Jaczko, and more recently policy advisor to now
13 Chairman Allison Macfarlane.

14 And Andy has worked on several NRC
15 rulemakings as a project manager and supervisor and
16 has a lot of experience in terms of being the project
17 manager for the preparation of environmental impact
18 statements for power reactor license renewals.

19 And before Andy came to the Commission, he
20 was a consulting engineer specializing in compliance
21 issues, both domestic compliance issues and
22 international compliance issues.

23 He has a degree, a bachelor's degree, in
24 meteorology from Penn State University and a master's
25 degree in environmental engineering from Clemson

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1 University.

2 The next branch chief that I would like to
3 introduce is Paul Michalak, and Paul is right here
4 with us. And Paul's branch is the Environmental
5 Impact Statement Branch, and I think it's fairly
6 obvious what the Environmental Impact Statement branch
7 does.

8 And he came to NRC in 2005 as a
9 hydrologist with the Uranium Recovery Branch in
10 Nuclear Materials Safety and Safeguards, called NMSS.
11 And since that time, he has also served in
12 increasingly responsible positions with the agency.
13 He was a senior project manager in our New Reactors
14 Office, and that was supporting the development of
15 environmental impact statements for the licensing of
16 new reactors.

17 And before he came to the Commission, he
18 had a long career, 17 years, as an environmental
19 consultant on numerous projects, ranging from site
20 characterization, remediation, and technical
21 litigation support. And prior to becoming the branch
22 chief, he was the branch chief of Materials
23 Decommissioning in the office -- NRC Office of Federal
24 and State Materials and Environmental Management
25 Programs.

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1 He earned his B.S. in education from
2 Temple University and an M.S. in hydrology from the
3 New Mexico Institute of Mining and Technology. So
4 whenever I hear New Mexico, I always think of
5 chemistry. Okay? But this was hydrology. Yes, okay.
6 Good. So that's Paul.

7 And next we have Tim McCartin. And Tim is
8 the senior advisor for performance assessment in the
9 Waste Confidence Directorate. He came to the NRC in
10 1981 and has worked, again, like all of the staff in
11 Waste Confidence Directorate, in increasingly
12 responsible positions, mainly on performance
13 assessment approaches and computational tools for the
14 evaluation of geological disposal of high-level waste,
15 and also on the national and international regulations
16 for geologic disposal.

17 So he is the technical lead here for
18 developing the NRC's regulations for the geological
19 disposal of high-level waste in 10 CFR Part 63, and he
20 has represented the NRC nationally and internationally
21 on performance assessment principles.

22 Tim got his bachelor's in physics from
23 Xavier University and a master's in physics from Wayne
24 State University.

25 And, finally, we are going to go to the

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1 main NRC attorney advising the Waste Confidence
2 Directorate, and that's Tyson Campbell, who is right
3 here. He is the lead counsel for Waste Confidence.
4 He is also Acting Deputy Assistant General Counsel for
5 Reactors and Material Rulemaking -- Materials
6 Rulemaking in the Office of General Counsel. So he
7 has some management responsibilities besides advising
8 the Waste Confidence Directorate.

9 He graduated from the University of
10 Virginia in 2003, and that was with a bachelor's in
11 physics. And then he went to the University of
12 Virginia Law School, and he got his Juris Doctor, his
13 J.D., from UVA in 2006. He also spent time studying
14 at the University of Nottingham in the United Kingdom,
15 studying international environmental law and human
16 rights at the University of Nottingham.

17 Tyson came to the Office of General
18 Counsel here at the NRC in the General Counsel's
19 Honors Law Program. And since that time he has worked
20 on many issues relating to nuclear waste regulation,
21 low-level waste disposal, the West Valley site, and
22 now waste confidence.

23 And Tyson is a 2012 graduate of the NRC's
24 Leadership Potential Program where up and coming new
25 NRC managers are groomed to take over management

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1 responsibilities.

2 And I think that is the biography of
3 everybody that we would like to hear. And are we
4 ready, Keith, to hear from you? This is Keith
5 McConnell.

6 MR. McCONNELL: Okay. Thanks, Chip. And
7 welcome, everybody, and good afternoon. As Chip
8 indicated, I'm the Director of the Waste Confidence
9 Directorate here at the NRC. And on behalf of that
10 directorate, I want to thank everyone, both on the
11 phone and here today in the meeting room, for
12 participating in the meeting.

13 The purpose of the meeting today is to
14 gather public comment on the draft generic
15 environmental impact statement and proposed rule for
16 continued storage of spent nuclear fuel after the
17 operating life of a power reactor, or Waste Confidence
18 rule for short.

19 The draft generic environmental impact
20 statement and proposed rule were both published on
21 September 13th of this year for public comment, and
22 they represent the culmination of the agency's
23 activities to respond to the U.S. Court of Appeals
24 from the District of Columbia's decision to vacate the
25 2010 version of the Waste Confidence rule.

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1 Given that the purpose of today's meeting
2 is to gather public comment on these two documents,
3 the NRC staff intends to limit its presentations to a
4 very small portion of the meeting. Again, the idea is
5 to maximize the opportunity for public comment on
6 these two documents.

7 I would note, as Chip has mentioned, that
8 the technical staff from the NRC who were responsible
9 for writing most of the draft generic environmental
10 impact statement are available out in the open house
11 area over in Two White Flint North to respond to any
12 specific questions or comments you might have.

13 I do want to start off with a few general
14 comments about our rulemaking process. Writing
15 regulations is fundamental to what we do here at the
16 NRC. Regulations are our vehicle for implementing
17 national policy and standards, and they also are a
18 mechanism for achieving NRC's goals, which is to
19 maintain public health and safety and security and the
20 protection of the environment.

21 One of the most important parts of our
22 rulemaking process is what is going on here today,
23 which is providing the public with an opportunity to
24 participate in that process and to provide their
25 comments on the proposed rule.

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1 I would also note that today's meeting,
2 and the 11 meetings that we have planned over the next
3 month and a half, represent just one aspect of our
4 efforts to make the Waste Confidence rulemaking open
5 and transparent.

6 We want to thank those of you who have
7 participated in the past in our scoping meetings back
8 last fall, and also those of you that have followed
9 along during our public status calls that we held
10 monthly.

11 Our efforts have been improved by the
12 public comments that we have received in the past, and
13 we want to encourage you all to provide your comments
14 on the draft generic environmental impact statement or
15 proposed rule, either at this meeting or at any of the
16 other mechanisms that we have in place to receive
17 comments.

18 In addition, there are some specific areas
19 within the proposed rule that the NRC Commissioners
20 have specifically asked for comment on. Your views on
21 those specific issues, as well as your general
22 comments, will help us improve the final generic
23 environmental impact statement and rule, and will also
24 serve to provide the Commission with important insight
25 as they undergo their deliberations when they get the

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1 final rule and final generic environmental impact
2 statement sometime next year.

3 So, again, I want to welcome you here
4 today, and welcome your public comments. I encourage
5 you to speak candidly and provide us with your
6 insights.

7 And with that, I'll turn it over to Andy
8 Imboden, who will talk briefly about the draft generic
9 environmental impact statement and proposed rule.

10 MR. IMBODEN: Thank you, Keith. Good
11 afternoon, everyone. And I'd like to add to Keith's
12 welcome and thank you for participating today.

13 I am Andy Imboden. I am the Chief of the
14 Communications, Planning, and Rulemaking Branch at
15 NRC's Waste Confidence Directorate.

16 The agenda for today's meeting is I plan
17 to provide a brief overview of the background of waste
18 confidence, some of the key aspects of the draft
19 generic environmental impact statement, the proposed
20 rule, and the methods for providing comment on the
21 documents. Then, we will get to the public comment
22 portion, or the heart of the meeting today.

23 So what was waste confidence? Waste
24 confidence accomplishes two things. The draft generic
25 environmental impact statement for waste confidence is

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1 a generic environmental analysis that satisfies part
2 of the Commission's National Environmental Policy Act
3 obligations for reactor licensing and relicensing, and
4 the licensing and relicensing of spent fuel storage
5 facilities.

6 The draft environmental impact statement
7 also serves as the regulatory basis to support a
8 rulemaking. The waste confidence proposed rule
9 generically addresses the environmental impacts of
10 continued storage and would contain a determination
11 concerning the feasibility of safe storage and the
12 timeframe for repository availability.

13 The generic environmental impact statement
14 and proposed rule only cover the timeframe after the
15 license life for reactor operation.

16 The proposed rule on waste confidence does
17 not, however, license any particular site or facility.
18 And it does not allow for long-term storage of spent
19 nuclear fuel at any site.

20 NRC has a long, rich history with waste
21 confidence, which was originally adopted by the
22 Commission in 1984. Since then, the rule has been
23 updated, most recently in 2010. In 2012, the Court of
24 Appeals for the D.C. Circuit vacated the 2010
25 rulemaking.

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1 The Court identified three deficiencies
2 with the Commission's environmental analysis that was
3 done to support the 2010 waste confidence rulemaking.
4 The Court found that the analysis didn't evaluate the
5 environmental effects of failing to secure permanent
6 disposal. The Court also directed the Commission to
7 provide a forward-looking assessment of spent fuel
8 pool leaks and the environmental consequences of spent
9 fuel pool fires.

10 The Court did find that either a generic
11 environmental assessment and an associated finding of
12 no significant impacts or a generic environmental
13 impact statement would be an acceptable means to
14 address the issues associated with waste confidence.

15 In response, the Commission directed the
16 staff to prepare an environmental impact statement to
17 look at these generic issues with the possibility of
18 issuing an updated Waste Confidence rule.

19 Finally, there are two things I'd like for
20 you to remember. The first is that waste confidence
21 is just a small part of the NRC's overall
22 environmental analysis for reactor and storage
23 facility licensing and relicensing. And then the
24 second thing is that Waste Confidence rule does not
25 license any facility or authorize storage after the

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1 expiration of a facilities license.

2 The draft generic environmental impact
3 statement describes the impacts of continuing to store
4 spent nuclear fuel beyond the license life for
5 operation of a reactor. This includes the impacts of
6 storing the spent nuclear fuel at reactor sites in
7 spent fuel pools and at independent spent fuel storage
8 installations. The storage could occur either at
9 reactor sites or away from reactor sites.

10 The generic environmental impact statement
11 describes why the NRC is revisiting waste confidence,
12 the alternatives that have been considered, how the
13 environmental impacts were evaluated, what facilities
14 are covered, and the environmental impacts of
15 continued storage at reactor sites and away from
16 reactor sites.

17 It also contains information on the costs
18 of the alternatives to the rulemaking, cumulative
19 impacts, and information on the feasibility of a
20 repository and the feasibility of safe storage of
21 spent fuel.

22 The draft generic environmental impact
23 statement assessed impacts of continued storage of
24 nuclear fuel for three timeframes based on when a
25 repository would become available. The short-term

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1 timeframe is 60 years after a reactor's license life.
2 The long-term timeframe is 100 years beyond that, so a
3 total of 160 years beyond a reactor's license life.
4 An indefinite scenario that was looked at is the
5 scenario when no repository becomes available.

6 The generic environmental impact statement
7 serves as the regulatory basis for the proposed rule.
8 The proposed rule would provide that the environmental
9 impacts of continued storage are generically addressed
10 and will not be revisited in future site-specific
11 licensing actions, unless the NRC discovers something
12 about the site that would make the application of the
13 conclusions in the generic environmental impact
14 statement inappropriate.

15 A proposed rule would revise the Nuclear
16 Regulatory Commission's regulations. Specifically,
17 the citation is Title 10 of the Code of Federal
18 Regulations, Section 51.23.

19 In addition to the statement on
20 generically addressing the environmental impacts, the
21 proposed rule would state that the analysis supports
22 the Commission's determination that it is feasible to
23 safely store spent nuclear fuel following license life
24 of operation of a reactor.

25 It would also state that it is feasible to

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1 have a mined geologic repository within 60 years
2 following the license life for operation of a reactor.

3 We are specifically seeking comment on
4 whether these last two aspects should be removed from
5 the rule.

6 The comment period ends on November 27,
7 2013. To be considered, comments must be received by
8 that date. Mailed comments must be postmarked by
9 November 27th. All comments, whether submitted in
10 writing or provided orally, are considered equally.

11 Comments on the generic environmental
12 impact statement and proposed rule may be submitted by
13 several methods. First, we are seeking public
14 comments at this meeting, in person or by the phone.
15 Any comments that you provide orally at this meeting
16 are being transcribed and will be considered part of
17 the record.

18 If you have written comments, you may
19 leave them with NRC staff located at the registration
20 table, and we'll make sure that those comments are
21 added to the docket. You may also email, fax, or mail
22 your comments to the NRC. You may also provide
23 written comments using the Federal Electronic
24 Rulemaking website, www.regulations.gov.

25 This concludes the NRC's presentation, and

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1 thank you for your attention.

2 And, Chip, thank you.

3 MR. CAMERON: Okay. Thank you, Andy.

4 Thank you, Keith.

5 As I mentioned previously, we do have time
6 for some questions from those of you here in the
7 audience or on the phones, all aimed at making sure
8 that you know what the process is for the finalization
9 of the environmental impact statement, anything on
10 what is going to happen at this meeting today, or
11 questions about the structure or organization of the
12 environmental impact statement. All of this is to try
13 to help you to comment more effectively on the
14 environmental impact statement.

15 And with that, is there anybody in the
16 room who has a question on any of those topics at this
17 point? And if you could just introduce yourself to
18 us.

19 MR. JUDSON: I'm Tim Judson with the
20 Nuclear Information and Resource Service. It's a
21 technical question with respect to the GEIS, the
22 generic environmental impact statement.

23 In the evaluation of the risk of a spent
24 fuel pool fire in the GEIS, it's not clear whether the
25 various causes of such an accident were considered

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1 cumulatively or whether the staff only looked at the
2 most -- what they deemed the most likely cause. And I
3 wonder if someone can address that.

4 MR. CAMERON: I think that that fits
5 within our purview. Paul?

6 MR. MICHALAK: Yes. Hi. Paul Michalak
7 here. For those of you who are not familiar with the
8 document, the spent fuel pool fires were addressed in
9 Appendix F of the document. And in that appendix, we
10 evaluated the weighted -- probability weighted
11 consequence of a spent fuel pool fire.

12 So we looked at the consequence of it,
13 which we actually found to be significant and
14 destabilizing, but we actually also then looked at the
15 probability of that, which we found to be small. So
16 the resultant risk from, or probability weighted,
17 spent fuel pool fire, consequence of spent fuel pool
18 fire was small. And that's our finding in the generic
19 environmental impact statement. We did not take a
20 cumulative look at that impact.

21 MR. CAMERON: And we have to get you on
22 the record, and we are generally not going to do
23 follow-ups. But go ahead, Tim.

24 MR. JUDSON: Sure. So I guess my question
25 is, in making that calculation, did you consider, in

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1 assessing the probability, the entire range of
2 potential causes, or did you only look at one likely
3 cause?

4 MR. MICHALAK: I believe that we looked at
5 a catastrophic loss of water in the pool, and that was
6 the -- so no matter what the event was that brought
7 it, we looked at a catastrophic loss of water in the
8 pool.

9 MR. CAMERON: Okay. Thank you for that
10 question, Tim. Thank you, Paul.

11 Let's go to a question right here, and
12 then we are going to go to Leslie March on the phone.
13 Yes.

14 MR. NELSON: My name is Dennis Nelson with
15 SERV. And I'd like to find out -- all of the
16 possibilities -- you talk about "generic," but generic
17 is a very ambiguous term. It's hard to really wrap
18 your mind around "generic." So I realize most fuels
19 are oxides, uranium oxide, or mixed plutonium-uranium
20 oxides.

21 But there are reactor fuels that are not
22 oxides. How do you deal with those? And the
23 likelihood of a catastrophic fire in those that are
24 uranium metal or plutonium metal are much greater than
25 those that are in oxide fueled.

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1 MR. CAMERON: Okay. Thank you. This
2 question obviously relates to the type of fuel that
3 was considered in the environmental impact statement.
4 And if we could just address that briefly and where
5 that analysis might be found. Paul, is that yours
6 also?

7 MR. MICHALAK: Yes, it's me again. Hi.
8 Paul Michalak again. In terms of the fuel that was
9 addressed in the generic environmental impact
10 statement, we considered fuel from both pressurized
11 and boiling water reactors. Pretty much I think I can
12 say that if it's licensed by the NRC, and it's at a
13 commercial site, it is covered within the generic
14 environmental impact statement. So in terms of the
15 fuel that was addressed in the generic environmental
16 impact statement.

17 MR. NELSON: So does that only include
18 oxide fuel?

19 MR. CAMERON: And we need to get everybody
20 on the transcript. So if you do have a follow-up, if
21 you could just wait until the microphone comes over.

22 Okay. One follow-up.

23 MR. NELSON: I just wanted to know about
24 oxide fuels. I guess all commercial reactors are
25 oxide fueled, so this may not be a non-question for

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1 the NRC.

2 MR. MICHALAK: Exactly. I'm thinking
3 about the fuel in Fort St. Vrain. I'm not sure if
4 that's an oxide fuel. That is considered in our
5 analysis. But off the top of my head, I can't
6 remember whether that's an oxide fuel.

7 MR. CAMERON: And are those -- the
8 different types of fuels that are considered, are they
9 all specifically identified in the environmental
10 impact statement?

11 MR. MICHALAK: Exactly. That would
12 be -- I think Chapter 2 provides more of a detailed
13 discussion of what exactly is in, and actually a
14 little bit of a discussion of what is out.

15 MR. CAMERON: Okay. Thank you very much,
16 Paul. Thank you, sir.

17 And, Ana, could you put Leslie March on
18 the phone for a question?

19 OPERATOR: Okay. Leslie, your line is now
20 open.

21 MS. MARCH: Hi. I'm sorry, I thought I
22 was pushing in the beginning to speak later on, so I
23 don't have a question right now.

24 MR. CAMERON: Okay. Thanks, Leslie. We
25 will look forward to hearing you later on. Anybody

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1 else on the phones? Anybody else in the room that has
2 a question before we go to comment?

3 (No response.)

4 Okay. Great. Thank you, all.

5 And we're going to start in the room, and
6 then we'll go to the phones. And we're going to go to
7 Gene Sault first, then Janet Phelan Kotra, and Kevin
8 Kamps, and Ellen Ginsberg.

9 So, Gene, are you here?

10 (No response.)

11 Okay. Gene is not with us, so we're going
12 to go to Janet Phelan Kotra. And, Janet, please come
13 up and join us at the podium. And while Janet is
14 coming down, note that Kevin Kamps from Beyond Nuclear
15 is going to be next, and then Ellen Ginsberg with the
16 Nuclear Energy Institute.

17 MS. KOTRA: Thank you very much for the
18 opportunity to comment this afternoon. My name is
19 Janet Kotra. I'm a scientist, a retired regulator,
20 and a founding member and former chairman of an
21 international forum on stakeholder confidence.

22 During my 28-1/2 years that I worked here
23 at NRC, I counted among my responsibilities nearly 14
24 years as project manager supporting the waste
25 confidence policy. I will be submitting formal

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1 written comments before the end -- the close of the
2 comment period. But this afternoon I want to confine
3 my remarks to three points.

4 First, I object to the way this Commission
5 defines "waste confidence" in Discussion Section 3,
6 Answer A2, in the September 13 waste confidence
7 Federal Register Notice and on the waste confidence
8 website that the Commission maintains today.

9 The current Commission mischaracterizes
10 waste confidence by defining it solely as a storage
11 issue. From its inception, waste confidence has been,
12 and continues to be, about confidence in the
13 eventuality of deep geologic disposal. And, yes, it
14 is also secondarily about the safety and availability
15 of storage until offsite disposal or storage comes
16 online.

17 Second, in its analysis, the Commission
18 projects that, based on international experience, 25
19 to 30 years is a reasonable estimate using a consent-
20 based process as recommended by the President's Blue
21 Ribbon Commission.

22 I believe the NRC fails -- excuse me -- 25
23 to 30 years is a reasonable estimate to site,
24 characterize, construct, license, and open a geologic
25 repository using a consent-based process, as

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1 recommended by that Blue Ribbon Commission.

2 I believe the NRC fails to consider key
3 factors in its analysis, factors that are peculiar to
4 the United States. These factors may render NRC's
5 projected timeframe overly optimistic.

6 Lastly, while I agree that today there
7 exists a much stronger technical basis for confidence
8 in geologic disposal, the current rulemaking fails to
9 take into account whether there exists sufficient
10 social and political bases for continued confidence
11 that such disposal will be realized in the United
12 States and what these inadequacies portend or imply
13 for the rulemaking.

14 For myself and for many members of the lay
15 public, the waste confidence decision and rule touch
16 on a most basic question. How can the Commission
17 continue to allow a generation of spent nuclear fuel
18 or permit operation of new generators unless it is
19 confident that there will be permanent disposal of
20 that waste?

21 Contrary to how it is defined in the
22 current regulatory notice, the original Federal
23 Register Notice announcing the first waste confidence
24 decision in 1984, the Commission stated and I quote,
25 "The purpose of this proceeding is solely to assess

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1 the degree of assurance now available that radioactive
2 waste can be safely disposed of."

3 Unfortunately, today's rulemaking -- it
4 went on to say other things, but it said up front that
5 waste confidence was about the availability of
6 disposal. Unfortunately, today's rulemaking in effect
7 fails to answer this most important question by
8 stating in effect, "We have confidence in disposal
9 because we have confidence in the safety of long-term
10 storage."

11 I'm sorry. No matter how well technically
12 justified that may be, this logic simply breaks down.
13 NRC is dodging the question the public most cares
14 about when it says disposal will become available when
15 necessary. Deep geologic disposal is, and remains our
16 nation's policy codified in U.S. law.

17 The public deserves an answer to the
18 question, is the Nuclear Regulatory Commission
19 confident that the United States will implement a
20 disposal solution for spent nuclear fuel in a
21 reasonable and realistic timeframe?

22 As to my second point, if a community in
23 the United States is to step forward and to consent to
24 host a repository, or even, for that matter, a
25 centralized interim storage facility, such a community

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1 must trust in the integrity of political and
2 regulatory systems with which it is to consent.

3 Members of such a community are
4 effectively entering into a contract on behalf of the
5 safety of their citizens, and especially, in the case
6 of a repository, the safety of their future
7 generations. The Nuclear Waste Policy Act that led to
8 selecting Yucca Mountain is such a statutory framework
9 enacted by Congress which set forth a process for
10 developing not one but two repositories.

11 This process was to be implemented by the
12 executive branch and licensed and overseen by an
13 independent Nuclear Regulatory Commission. Any
14 prospective host community today will have to confront
15 the sober reality that the U.S. Government failed to
16 implement its own nuclear waste law.

17 Absent an executive branch willing to
18 carry out a nuclear waste law enacted by Congress, and
19 overseen by a safety regulator perceived as truly
20 independent by that host community, how could any
21 community have confidence going forward that this or
22 any other nuclear waste law will in fact be honored or
23 implemented?

24 And I have to say that in reading this
25 proposed rule no attempt has been made in this

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1 proposal to address the impact of this breakdown in
2 the U.S. public's ability to rely on its government
3 and on NRC itself to comply with the nation's own
4 nuclear waste laws, especially in light of the recent
5 ruling of the U.S. Court of Appeals, District of
6 Columbia Circuit.

7 Finally, to my third point, after all that
8 has happened since 1999, should NRC still have
9 confidence in waste disposal? Since 1984, the
10 Commission has expressed, and later affirmed, its
11 confidence that deep geologic disposal is feasible.
12 Nothing has emerged to lessen NRC's confidence in the
13 technical feasibility of repository disposal. That
14 much is not in dispute.

15 As this rulemaking notes, much more
16 scientific and engineering experience and evidence has
17 emerged to reinforce the Commission's initial
18 findings. And I have to add that a lot of the
19 confidence has been contributed to, quite ably, by NRC
20 scientists and engineers and their colleagues at the
21 Center for Nuclear Waste Regulatory Analysis in San
22 Antonio.

23 Also among the reasons for greater
24 confidence are the findings and recommendations of the
25 Blue Ribbon Commission for America's Nuclear Future,

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1 which endorsed disposal in deep geologic repositories
2 when selected using a consent-based process.

3 It is important to recall, however, that
4 the Commission also founded its confidence, both in
5 1984 and again in 1990, on confidence in the existence
6 of a statutory framework enacted by a bipartisan
7 Congress setting forth a process or a path forward for
8 the development of repositories. At no time did the
9 respective commissions involved contemplate that the
10 process itself laid out in statute would become
11 corrupted and unworkable.

12 MR. CAMERON: Janet, can I just ask you to
13 sum up for us?

14 MS. KOTRA: I'm getting to the end. I'm
15 very close. Nor did those commissions anticipate that
16 subsequent commissioners would later be unable or
17 unwilling to carry out their statutory obligations.
18 Yet, as documented in the recent ruling of the second
19 highest court in the land, this is precisely what has
20 happened.

21 The Commission must, therefore, as a
22 result, declare that there no longer exists a basis
23 for waste confidence. Such a bold declaration would
24 not only be honest, it would address forthrightly the
25 fundamental question undergirding the original purpose

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1 of the waste confidence policy.

2 Recognizing the lack of waste confidence
3 would generate significant attention from both pro and
4 anti-nuclear interests and provide NRC an opportunity
5 to submit a substantive legislative proposal to the
6 U.S. Congress to suggest amendments to existing
7 legislation to amend or replace the Nuclear Waste
8 Policy Act.

9 I respectfully and earnestly urge the
10 Commission to give this serious consideration.

11 Thank you, once again, for the privilege
12 of being able to comment here this afternoon.

13 MR. CAMERON: Thank you. Thank you very
14 much, Janet.

15 We are going to next go to Kevin Kamps
16 from Beyond Nuclear. Kevin?

17 MR. KAMPS: Good day, everyone. Thank you
18 for this opportunity. My name is Kevin Kamps from
19 Beyond Nuclear. I serve as Radioactive Waste
20 Specialist, and Beyond Nuclear is a national watchdog
21 environmental group on the nuclear power industry.

22 The National Environmental Policy Act
23 requires consideration of all reasonably foreseeable
24 environmental impacts of a proposed action from cradle
25 to grave. The question that must be answered in a

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1 reactor licensing decision is, if you look all the way
2 to the end of the reactor's life, including
3 decommissioning, spent nuclear fuel, or irradiated
4 nuclear fuel storage and disposal, is having that
5 source of electricity -- nuclear power -- worth all of
6 the environmental costs, risks, and impacts that will
7 then inevitably ensue?

8 As soon as NRC licenses a reactor, the
9 generation or creation of spent nuclear fuel,
10 irradiated nuclear fuel, and all of its related costs,
11 risks, and impacts will then follow. The NRC
12 effectively assumes licensing, and then goes on from
13 there to look at the impacts of irradiated nuclear
14 fuel storage, although it does a very poor, woefully
15 inadequate, and, in my opinion, legally insufficient
16 and violative job of doing that.

17 But the whole point of the environmental
18 impact statement is to allow an informed decision
19 regarding whether to license the reactor in the first
20 place; that is, to allow the creation of irradiated
21 nuclear fuel. NRC does not even attempt to answer
22 that question in this environmental impact statement.

23 What are the costs and risks and impacts
24 of storing irradiated nuclear fuel for any period of
25 time, let alone forevermore? Is having a new or

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1 extended reactor operating license worth the costs,
2 risks, and impacts of storing high-level radioactive
3 waste forever into the future? The answer to that
4 question is no.

5 Have these costs, risks, and impacts been
6 mitigated? The answer to that is no.

7 This generic environmental impact
8 statement is completely devoid of this issue, which
9 makes a mockery of the National Environmental Policy
10 Act as well as the Court ruling on New York v. NRC.

11 The mountain of commercial radioactive
12 waste in the United States is now 56 years high, and
13 we don't even know what to do with the first cupful.
14 Obviously, the only real answer to the high-level
15 radioactive waste problem is to stop making it.

16 For the 70,000 metric tons of commercial
17 high-level radioactive waste that already exists in
18 the United States, for well over a decade a coalition
19 of hundreds of environmental groups representing all
20 50 states have called upon the Nuclear Regulatory
21 Commission to implement hardened onsite storage as a
22 regulatory mandate to empty the vulnerable pools which
23 are at risk of leaks and fires due to accident or
24 attack or simple age degradation into hardened dry
25 cask storage that is designed and built well, designed

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1 to last for not decades but centuries without leaking
2 into the environment, designed to withstand terrorist
3 attacks, and designed with safeguards against
4 accidents, such basic safeguards as radiation
5 monitors, heat monitors, and pressure monitors, which
6 are not currently required.

7 Regarding pool leaks, there is a long list
8 of pool leaks that have already occurred -- at Dresden
9 Unit 1, due to a broken pipe; at Hatch in Georgia; at
10 BWX Technologies in Lynchburg, Virginia; at Indian
11 Point 1 and 2 on the banks of the Hudson River
12 upstream of New York City; at Salem Unit 1 in New
13 Jersey; at Connecticut Yankee. All NRC licensees.

14 There has also been a pool leak at a
15 Department of Energy pool, the high flux beam reactor
16 at Brookhaven National Lab on Long Island.

17 In terms of the risks of pool fires,
18 Fukushima Daiichi Unit Number 4 is the most obvious
19 example of the potentially catastrophic risks of pool
20 fires. If that building were to collapse, lose its
21 cooling water supply, and catch fire, the magnitude
22 would be an order of magnitude or greater than what we
23 have already seen in terms of radioactivity releases
24 at Fukushima Daiichi.

25 And I will close on that point, that I

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1 agree with NRC Chairwoman Allison Macfarlane when she
2 wrote, along with a team of authors, in 2003 that the
3 risks of pool fires at commercial nuclear power plants
4 in the United States are so great that expedited
5 transfer into hardened onsite storage dry casks is a
6 very important national security priority.

7 Thank you.

8 MR. CAMERON: Thank you very much, Kevin.

9 We are next going to go to Ellen Ginsberg,
10 Nuclear Energy Institute.

11 MS. GINSBERG: Good afternoon. I'm Ellen
12 Ginsberg. I serve as Vice President and General
13 Counsel for the Nuclear Energy Institute.

14 My members include all operating reactor
15 licensees, as well as the owners of decommissioned
16 facilities.

17 I appreciate the opportunity to offer the
18 following comments on behalf of NEI and its members.
19 I also note that NEI will be providing written
20 comments on the proposed rule and draft GEIS in
21 November. My comments today are meant to support and
22 be consistent with the forthcoming written comments.

23 From the industry's perspective, the waste
24 confidence rulemaking has been an excellent example of
25 regulatory transparency. We commend the agency for

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1 encouraging and embracing wide public participation
2 through multiple avenues, allowing the agency to
3 consider stakeholder comments from all and various
4 viewpoints.

5 This approach will ensure that the Waste
6 Confidence rule and GEIS are grounded in a thorough
7 and comprehensive record. Also, I'd like to highlight
8 the importance of a timely resolution of these waste
9 confidence issues.

10 We strongly support maintaining this
11 rulemaking as a priority. Nuclear power plays an
12 important role in this nation's energy mix. Given
13 that 63 percent of the nation's carbon-free
14 electricity comes from nuclear generation, continuing
15 to license safe, secure, reliable, and environmentally
16 sound nuclear facilities is simply sound public
17 policy. And, more particularly, the resumption of
18 licensing activities is essential for long-term power-
19 planning decisions.

20 The waste confidence decision has always
21 been, and continues to be, somewhat of a confusing
22 item. We support the NRC's efforts, therefore, to
23 clarify the related issues. As Andy stated, from a
24 substantive viewpoint, it is important to understand
25 that the waste confidence issues continue -- does not

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1 constitute a licensing decision.

2 The rule does not authorize licenses and,
3 instead, it compromises just one element of the
4 agency's NEPA analysis as licenses and renewed
5 licenses are considered. Individual plants must still
6 separately obtain a license and be reviewed for the
7 necessary safety and environmental issues.

8 The industry commends the staff's effort
9 to communicate how the waste confidence fits into the
10 broader regulatory context, and we urge you to
11 continue doing this as you proceed through these
12 meetings. In this vein, I would also like to remind
13 everyone that it is important to keep in mind the
14 relevant NEPA principles -- National Environmental
15 Policy Act principles -- as the NRC proceeds through
16 this rulemaking.

17 First and foremost, an EIS serves two
18 purposes. It is intended to ensure that Federal
19 agencies have available and consider detailed
20 information on the environmental impacts of major
21 federal actions. This is the so-called "hard look."

22 Second, the EIS also is intended to ensure
23 that information is made available to the public and
24 other stakeholders who may also play a role in the
25 decision-making process. Notably, and importantly in

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1 this context, NEPA itself does not mandate specific
2 results or licensing decisions, but, rather, it
3 prescribes a process designed to prevent uninformed
4 agency action.

5 Agencies may take action, even in
6 situations where significant environmental impacts may
7 result, because the agency has carefully balanced the
8 various environmental and other impacts and is not to
9 elevate such impacts over other considerations.

10 Finally, NEPA does not require that an
11 agency delay action until better or other information
12 becomes available. CEQ regulations directly address
13 the notion of incomplete or unavailable information
14 and suggest that worst case assumptions simply are not
15 required.

16 And to illustrate that point, there is NRC
17 case law holding in part that NEPA did not require the
18 NRC to withhold the granting of a renewed license
19 simply because there may be some future
20 available -- future information that is not currently
21 available.

22 So, in conclusion, while the NRC has
23 chosen to broadly address the environmental impacts of
24 waste storage in the draft GEIS, it is important to
25 recognize and not to exaggerate what the Court of

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1 Appeals directed the agency to address; that is, spent
2 fuel pool fires, leaks, and the no repository
3 scenario.

4 And in addressing the agency, the Court
5 asked the agency to provide a basis for its
6 conclusions. The Court of Appeals did not reject the
7 NRC's longstanding findings on the feasibility of a
8 geologic repository or the safety of spent fuel pool
9 storage -- spent fuel storage pending disposal.

10 The prior findings and record continue to
11 support the current rulemaking and GEIS.

12 As time is short, I will conclude my
13 statement there. We appreciate the opportunity to
14 present these views. Thank you.

15 MR. CAMERON: Thank you very much, Ellen.

16 We are going to go to people on the phones
17 now. And, Ana, we are first going to go to Ace
18 Hoffman, then to Don Safer, then to Susan Shapiro, and
19 then to Brian Paddock. So can you see if Ace is with
20 us and if he's ready to speak?

21 OPERATOR: Okay. One moment here.

22 MR. CAMERON: And just as a reminder,
23 those of you on the phone, you have to press star one
24 to join the queue.

25 OPERATOR: Okay. So you said the first

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1 speaker would be Ace Hoffman?

2 MR. CAMERON: Yes.

3 OPERATOR: Is that correct?

4 MR. HOFFMAN: Hi. Can you hear me?

5 OPERATOR: Ace, your line is open.

6 MR. HOFFMAN: Yes. Hi. Can you hear me?

7 MR. CAMERON: Yes, we can, Ace.

8 MR. HOFFMAN: Okay. Hi. Thank you. I
9 want to start by talking about money. I think that
10 what we are all looking for is a cheap solution to a
11 very complicated problem. I would like to recommend,
12 for example, that we wrap our nuclear waste in gold or
13 iridium, iridium because a metallurgist suggested it
14 would be good, and gold because I think that obviously
15 would be good because of its secure properties, it's
16 strong, it's -- instead, we are using lead and steel
17 and cement.

18 And we're talking about a 100-year
19 changeout; that is mentioned several times in the
20 document. And a 100-year changeout is going to
21 cost -- well, let's see, we've got 1,500, roughly, dry
22 casks nationally right now. And that means in 100
23 years, if they last that long, we're going to have to
24 start changing them out at the same rate that we're
25 making them.

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1 And if we had all of the fuel that
2 we -- we would like to accelerate the rates that we're
3 making them, and we'll have nearly 10,000 dry casks,
4 just by the time we get all of the fuel that has
5 already been made put into dry casks. That's an awful
6 lot of dry casks, but that's only the beginning.

7 That's only what they're going to have to
8 do in 100 or 110 years, or whatever it takes us to get
9 it all in. And then the other, oh, 100,000 dry casks
10 that have been built in the meantime are all going to
11 also need to be replaced over and over and over again.

12 Now, we're not allowed to talk about -- or
13 we don't want to talk about terrorism, we can't get
14 into detail about what size of airplanes can crash
15 into a dry cask safely, but that is not what they are
16 designed to do. They are just designed to keep the
17 little rods held safely and to let somebody walk by
18 them because they shield the radiation, the gamma
19 rays, and so on. But we're talking about delaying
20 this -- the permanent repository.

21 But, meanwhile, this is when the worst
22 fuel is -- when the fuel is the absolute most
23 dangerous because of all the fission products that are
24 inside.

25 And with all due respect to the experts in

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1 the room, I heard of geology experts, and I heard of
2 attorneys, but I didn't hear human failure experts or
3 economists to look at these 300-year projections of
4 what we're doing to our country and our children. I
5 didn't hear psychologists there to discuss the
6 property value losses that there is going to be.

7 I didn't even hear nuclear physicists
8 present, and let alone DNA damage specialists, whoever
9 those would be. And, of course, I didn't hear any
10 large event accurate estimators, the people who would
11 have told us what was going to happen in Fukushima and
12 we didn't listen. None of them were there either.
13 They don't exist, really. I mean, some people gave us
14 a little bit of warning but most people said this
15 couldn't happen.

16 So we're talking about licensing and
17 relicensing. That was Andy's opening statement. And
18 10 years ago, 15 years ago, when they were given this
19 dry cask -- I have the documents, I was looking at
20 them just a day or two ago, and the word "temporary"
21 was always in the dry cask phraseology, that this was
22 a temporary solution.

23 But he didn't say "and relicensing and
24 relicensing and relicensing" for 300 years, 500 years,
25 and that's with changing them out. Just calling it

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1 licensing/relicensing is not going to be good enough.
2 It could be quite a bit longer than that. The
3 environmental consequences of dry cask fires are truly
4 being completely ignored in these proceedings.

5 I think that people will be replacing
6 these things as fast as we're building them, and that
7 is not an optimistic scenario. We are not taking into
8 account the chances of failures in what -- in how
9 people do things. I mean, there is -- we have almost
10 10,000 dry casks. They are not all going to go right.
11 So let's look at what a really bad accident would look
12 like.

13 But, instead, you're taking away the
14 environmental impacts and making them generic. The
15 NEI representative was saying that you are not making
16 decisions with this; we are only setting -- you know,
17 it's not a licensing decision.

18 But, actually, it's forcing the licensing
19 decisions to not discuss all sorts of things. So it's
20 very much a huge part of licensing. And maybe they
21 don't understand what is going on here, which would
22 suggest that you haven't done your job of reaching out
23 to the public, so that they understand what's going on
24 here in this meeting today, because right now that
25 fuel is 100 times or 1,000 times more dangerous than

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1 it is going to be when you finally decide to put it
2 someplace safe. And I think right now is the time to
3 make sure that it's someplace safe, and there is no
4 place that is going to take it.

5 So that's really all I have to say, and
6 thank you very much for listening. And I'll take any
7 comments, if you have questions.

8 MR. CAMERON: Thank you. Thank you very
9 much, Ace.

10 We are going to go on to our next person
11 on the phone, which is -- or who is Don Safer. And,
12 Ana, can you put Don Safer on? Don, hit star one if
13 you want to talk.

14 (Pause.)

15 Ana, are you with us?

16 OPERATOR: I am standing by on the call
17 here. My name is Jenny now and I'm assisting, and I'm
18 watching for the signal, but I'm not showing that
19 person in conference right now.

20 MR. CAMERON: Okay. Thank you very much.

21 He is on the line? Okay. Don, can you
22 hit star one, so that we can get you on? Don Safer?

23 (Pause.)

24 Okay. And it's Jenny?

25 MR. SAFER: Can you hear me, Chip?

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1 MR. CAMERON: Oh, hey, Don. Yes, we can
2 hear you. Good.

3 MR. SAFER: I had to hit star one probably
4 four times, but thank you.

5 MR. CAMERON: Okay.

6 MR. SAFER: I appreciate the opportunity
7 to speak. And I wanted to start by putting this
8 exercise in context today. We all know the government
9 is shutting down, and nobody really expected that, and
10 it hopefully will be a temporary shutdown.

11 But this radioactive waste is going to
12 stay toxic for millions of years, and our government
13 will not exist certainly in that timeframe to make
14 sure that this stuff does not harm future generations.
15 So I think we need to be humble in our relationship to
16 future generations and stop making this radioactive
17 waste.

18 We don't need to make it anymore to
19 generate electricity. Solar energy, wind power,
20 energy efficiency, they all relegate nuclear power to
21 a dead end and a historical mistake that future
22 generations will already pay for until the basically
23 end of time.

24 We need to stop making any more
25 radioactive waste. I realize that may be beyond the

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1 scope of this particular Waste Confidence rule, but I
2 think it needs to be stated.

3 Further, I think in terms of the Nuclear
4 Regulatory Commission, the only reason we are having
5 this exercise, and the public is having the
6 opportunity to comment, is it took a Federal court
7 ruling to vacate the Nuclear Regulatory Commission's
8 Waste Confidence rule. It had been challenged
9 internally by people concerned that it made no sense,
10 that it was circular thinking with no base in reality,
11 and it took a Federal court to require the
12 reconsideration.

13 As I have followed this process, I have
14 been amazed by the Nuclear Regulatory Commission's
15 bias toward continuing to regulate -- to allow
16 radioactive waste to be manufactured by these power
17 plants. And it just points out the fact that the very
18 beginning of -- the Nuclear Regulatory Commission was
19 created because the Atomic Energy Commission was
20 perceived as being unduly favorable to the industry.
21 And I think the NRC is that -- in that same situation
22 now.

23 It is interesting to note that, according
24 to records I have found, NRC has over 4,000 employees,
25 and you do not need people doing this type of thing

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1 for solar power, for wind power. We just need to quit
2 making this radioactive waste.

3 The fact that we have been making it for
4 60 years or more, and we have no place to put it and
5 no prospect, and that you are talking about going 100
6 years into the future before we actually have some
7 place to put this material, and whether that is even
8 going to be, those are all geologic bets, whether
9 whatever we decide, whatever deep ground deposit we
10 put these materials into, in terms of geologic time,
11 thousands of years, tens of thousands of years, there
12 is no real certainty that you are not going to have
13 some geologic shift, and the material that we thought
14 was safely removed from the environment will then
15 become exposed in some unexpected manner.

16 So I'm just going to close by saying we
17 just need to stop making more radioactive waste, and
18 the Nuclear Regulatory Commission should start
19 decommissioning every one of these reactors. There is
20 not enough money to decommission them anyway at this
21 point, and we need to stop making more radioactive
22 waste.

23 Thank you.

24 MR. CAMERON: Okay. Thank you very much,
25 Don.

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1 And Susan Shapiro is not on the phone yet.

2 And I would just note that if we call on
3 someone and they're not in the audience, or not on the
4 phone, we will check back later in the meeting to see
5 if they joined us. So you won't lose your opportunity
6 to comment.

7 So we are going to go to Brian Paddock
8 next, and then to Michelle Lee. And either Ana or
9 Jenny, Operator, could you put Brian Paddock on?

10 And, Brian, you have to hit star one.

11 OPERATOR: Please press star zero.

12 MR. CAMERON: So is it star zero now,
13 Operator?

14 OPERATOR: Star zero will send a signal
15 out into the conference. Star one is to ask a
16 question over the phone, if the question and answer
17 queue is activated.

18 MR. CAMERON: Well, we are taking comments
19 now, so we do want to hear the people who are on the
20 phone that were calling, so we do want to use the star
21 one. So if you could put Brian Paddock on. And,
22 Brian, hit star one, so that you can get on.

23 OPERATOR: Okay, sir. And so would you
24 like me to just have the question and answer queue
25 open and then just watch for that person to come into

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1 the question and answer queue as well?

2 MR. CAMERON: Yes. And you can -- I know
3 you're referring to question and answer in terms of
4 communicating with us. But we are taking comments.
5 We want to listen to the people on the phone, so --

6 OPERATOR: Sure.

7 MR. CAMERON: -- if you could put Brian
8 in.

9 OPERATOR: Okay. And I'm not showing
10 Brian -- what did you say his last name was?

11 MR. CAMERON: Paddock.

12 OPERATOR: I'm not showing his line in
13 conference at this time.

14 MR. CAMERON: How about Michelle Lee? Is
15 her line in conference? Michelle, star one.

16 (No response.)

17 So, Operator, are you showing anything for
18 Michelle Lee?

19 OPERATOR: No, sir. I'm looking, and I
20 have looked at the list and I'm not showing her
21 either. I'm sorry.

22 MR. CAMERON: Okay. Well, we are going to
23 stay on the phone here for a while to see if we can
24 get someone else on. And that would be Stephen
25 Sondheim. Stephen, are you on? Star one.

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1 OPERATOR: I'm not showing his name
2 either, sir.

3 MR. CAMERON: Okay. Okay. We are going
4 to go to people here in Rockville, and then we will
5 take a short break and -- just to make sure that we
6 have everything working correctly on the phone.

7 So we're going to go to people here in the
8 audience, Operator, and we'll be back to you in a
9 little bit. And we're going to go to Rod McCullum,
10 Tim Matthews, Diane D'Arrigo, and Jeffry Guido.

11 This is Rod McCullum.

12 MR. McCULLUM: Thank you, Chip. And I
13 want to echo what Ellen Ginsberg said and thank the
14 NRC for its openness in providing this opportunity.
15 At a time where we may be questioning our faith in our
16 government during the shutdown, this is certainly an
17 example of how our democratic processes do work, that
18 we do have independent agencies that do reasoned
19 considerations of important issues such as this.

20 I just want to say a few words on behalf
21 of the folks that I work with on a daily basis, the
22 professional men and women out there who are
23 responsible for managing used nuclear fuel at our
24 sites, who have compiled a very impressive safety
25 record.

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1 We have loaded 1,700 dry cask storage
2 systems with absolutely no release of radioactivity.
3 They have been sitting on the pad, some of them, for
4 as long as 30 years. We have done scientific studies.
5 We have opened one up after over a decade in storage.
6 We have looked inside.

7 We have a tremendous base of evidence to
8 know that these systems were steel, concrete, lead,
9 used 100 tons of protection for every 10 tons of used
10 nuclear fuel -- do provide outstanding protection.

11 The individuals I work with every day,
12 they are -- I have been working for NEI for 15 years,
13 and they are probably the biggest reason I keep coming
14 into work every day, because I am so proud of the job
15 they do and the experience that they provide and all
16 of the innovation that has occurred in our industry.

17 We have three vendors providing these
18 casks. These vendors don't just meet regulations.
19 They have to compete. It's like Ford and General
20 Motors and Chrysler except it's Holtec and
21 Transnuclear and NAC.

22 That is, in general, the attitude of the
23 folks I work with on a daily basis at the utilities
24 and at the vendors. We don't just meet regulations;
25 we exceed them. And a lot is said in this EIS about

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1 confidence in NRC's regulatory process, and that is
2 how we will know that storage is safe.

3 And, well, yes, the regulatory process is
4 very strict, but it is indeed the nuclear culture that
5 we have that is in place on all of those individuals I
6 know and am speaking out on behalf of here today, as
7 well as I know the ones that will come in the future
8 because you don't get into this business unless you
9 have that conference.

10 Someone else I respect is Janet Kotra, who
11 spoke earlier. And I certainly understand her
12 frustration on geologic disposal. I know she was here
13 at the very beginning of all of this, and they made a
14 significant contribution when she was with NRC. And,
15 yes, waste confidence did initially used to be about
16 primarily geologic disposal.

17 But over time our system has given us
18 delays in geologic disposal, and now it has also
19 become about storage, which is why in pools and in
20 casks our ability to safely store it is indeed
21 something that we can have confidence in. And we will
22 continue to provide this confidence.

23 Some things that Kevin Kamps said earlier,
24 the spent fuel pool fires, I think the most relevant
25 piece of data there is what is in NRC's most recently

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1 issued spent fuel pool study, which showed that the
2 fuel is only hot enough to burn -- even if you drain
3 all of the water out of the pool -- I mean, you can
4 noodle the scenarios about what causes it to drain or
5 what doesn't cause it to drain, but it is only hot
6 enough to burn for the first two months after it comes
7 out of the reactor. That's not the time periods we're
8 interested in here.

9 There were a lot of rumors at Fukushima 4,
10 but those rumors turned out to be false. The fuel in
11 seven pools, including three that were in buildings
12 that completely blew up, is still safe. It's still
13 under water. Very robust structures, a lot of nuclear
14 cultures.

15 He mentioned a number of reactors where
16 there were spent fuel pool leaks, all of them
17 considered in this EIS, all of the impacts meeting the
18 definition of small because the right steps were
19 taken.

20 He mentioned one in particular that I have
21 personal experience with -- the high flux beam reactor
22 in Long Island. I was in the Department of Energy. I
23 worked on that. I worked with the people who went out
24 into the communities and took the steps we needed to
25 assure people that their drinking water would be safe.

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1 No regulatory limits were ever exceeded or approached.
2 We don't just meet regulations; we exceed regulations.

3 There is a lot here to have confidence in.
4 There is a lot more that will be said. But -- and I
5 do think that, you know, these 100-year scenarios and
6 repackaging, NEI may have some things to say about
7 that. We don't think we are going to be repackaging
8 every 100 years.

9 We do think that the international
10 consensus on geologic disposal will someday reach our
11 government and it will build a repository. But until
12 then, our commitment, the regulatory framework, all of
13 the things that are mentioned in the EIS, will keep
14 these materials safe in these robust structures.

15 And I thank you for your time.

16 MR. CAMERON: Okay. Thank you very much,
17 Rod.

18 And Tim? This is Tim Matthews.

19 MR. MATTHEWS: Thank you, Chip.

20 Good afternoon. My name is Tim Matthews.
21 I'm a partner in the nuclear regulatory practice at
22 the law firm Morgan, Lewis & Bockius here in
23 Washington.

24 My firm represents various stakeholders in
25 the regulated nuclear community, including owners and

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1 operators of power reactors, independent spent fuel
2 and storage installations, various fuel-cycle
3 facilities, and research reactors, among others. We
4 represent a wide array of entities involved in the
5 back end of the nuclear fuel cycle.

6 Comments that I express today are our own
7 as participants in this regulated community. They do
8 not necessarily represent the views of any particular
9 licensee, applicant, or of any other client.

10 We appreciate this opportunity to speak
11 here today. We commend the agency's efforts that have
12 brought us this far, and encourage the continued
13 engagement of the Commissioners, senior NRC
14 management, and the technical staff to complete the
15 rulemaking in a timely manner.

16 Timely resolution is critically important.
17 The Commission has suspended a number of licensing
18 decisions pending resolution of this issue. Deferral
19 of these decisions has impacts with the organizations
20 affected. Licensing decisions are essential for the
21 long-term power planning and other business decisions,
22 such as schedules for capital improvements. This
23 essential decision-making will remain disrupted and
24 inefficient until licensing decisions resume.

25 Timely completion of the draft GEIS

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1 demonstrates what the NRC staff can accomplish when
2 given clear Commission direction, management
3 engagement, and adequate resources. This rulemaking
4 should serve as a benchmark for other significant NRC
5 activities, such as licensing and design certification
6 reviews, extended schedules for which seem to have
7 become accepted in some corners as a new norm.

8 The example demonstrates conclusively that
9 the agency -- what the agency can do.

10 I would like to touch briefly on the
11 impact of the waste confidence decision in individual
12 licensing actions.

13 While many safety reviews of licensing
14 actions have continued on schedule, in some cases the
15 parallel environmental review schedules have slipped
16 as resources have become diverted to support this GEIS
17 effort. The staff should promptly return those -- to
18 those environmental reviews and prioritize review
19 resources so that further delay in adjudicatory
20 proceedings or licensing issuances is avoided.

21 In the fall of 2012, the Commission
22 ordered that consideration of waste confidence
23 contentions in adjudicatory proceedings before the
24 Atomic Safety and Licensing Board be held in abeyance
25 while the agency determined how it would address the

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1 issues remanded by the D.C. Circuit.

2 The agency has now established a clear
3 path and is well along the way to generic resolution
4 of the remanded issues. Accordingly, the staff should
5 promptly recommend to the Commission options for
6 resumption of adjudicatory reviews, and specifically,
7 the exclusion of waste confidence-related issued from
8 review in individual licensing proceedings, absent the
9 grant of a case-specific waiver to challenge a matter
10 that is the subject of an ongoing generic rulemaking.

11 I have just a few comments on the
12 development of the generic EIS. The NRC and its staff
13 are widely recognized for their technical expertise.
14 The GEIS appropriately draws upon that expertise and
15 upon evaluations performed by the technical staff.

16 Though not required by NEPA, the GEIS
17 makes very conservative assumptions. In other words,
18 the GEIS makes assumptions that tend to overstate the
19 environmental impacts of used fuel storage. For
20 example, the GEIS assumes that used fuel will be moved
21 to new casks every 100 years under the long-term
22 storage scenario, even though current science and
23 experience shows that cask replacement need not
24 necessarily occur that frequently.

25 The GEIS includes detailed sections and

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1 appendices that thoroughly address the three issues
2 identified by the D.C. Circuit in *New York v. NRC*.
3 Specifically, the no repository scenario, spent fuel
4 leaks, and spent fuel pool fires.

5 Notably, the no repository scenario is
6 fully evaluated throughout the GEIS as the in-depth
7 storage scenario. And, furthermore, the GEIS includes
8 a detailed technical evaluation of the environmental
9 risks of spent fuel pool leaks and fires, and in
10 particular the supporting appendices in the GEIS fully
11 demonstrate that the risk-based impacts of spent fuel
12 pool leaks and fires both are small.

13 I would like to close with two points.
14 First, the agency has an established history of
15 addressing this set of waste confidence issues
16 generically. That approach was not the subject of
17 criticism by the D.C. Circuit. In fact, the generic
18 approach and reliance on the substantial body of
19 existing work was anticipated by the Court.

20 Second, NEPA does not require unanimity of
21 public opinion or even consensus. It requires that
22 the agency take a look at the available information
23 and apply a rule of reason. NRC already has gone well
24 beyond the requirements of NEPA to establish -- to
25 evaluate the issues in this draft GEIS. It should now

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1 complete the process and timely issue the final GEIS
2 and the final rule.

3 We appreciate this opportunity to
4 participate in this important rulemaking proceeding
5 and encourage the staff to continue toward timely
6 completion of this important activity.

7 Thank you.

8 MR. CAMERON: Okay. Thank you. Thank
9 you, Tim.

10 And next we're going to hear from Diane,
11 Diane D'Arrigo from Nuclear Information and Resource
12 Service. And Jeffry Guido will be next, while Diane
13 is making her way down here.

14 MS. D'ARRIGO: Hi. I'm Diane D'Arrigo,
15 Nuclear Information Resource Service. We will be
16 making additional comments at the November 14th
17 meeting and providing detailed written comments. And
18 also, we will be speaking at Charlotte.

19 So, basically we will ask that the comment
20 period be extended, since it is apparently likely -- I
21 missed the beginning here on whether the rest of the
22 hearings are going to take place or what the plan is
23 for those. But we would like to have the comment
24 period extended, since the government has shut down.

25 And the shutdown of the government is an

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1 indication that it can't be trusted to take care
2 of -- to have institutional controls over radioactive
3 materials for as long as they remain dangerous. It
4 seems incredulous to me that the -- incredible to me
5 that the NRC is seriously talking about being able to
6 afford and have institutional controls and
7 re-containerize the waste indefinitely. Sixty years
8 is a stretch; 160 years is a much longer stretch, but
9 then into infinity pretty much.

10 The economic analysis that was done in the
11 environmental impact statement analyzes the cost of
12 the analysis of the different options of which choice
13 the EIS should choose, whether to look at -- the
14 economic analysis is inadequate because it does not
15 look at the real costs of managing the waste, and
16 compare those costs. And there is no indication of
17 where the costs for the long-term management will be.

18 The EIS is inadequate in that it does not
19 really fully analyze the -- what the Court required,
20 an analysis of the fire scenario, what would cause a
21 fire, and simply because your guess is that your
22 estimate -- expert estimate is that it is unlikely,
23 the full consequences of a fire are not really
24 analyzed. They are analyzed for one specific reactor,
25 but it's not an adequate scenario for a situation like

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1 Indian Point or places that have very high
2 populations.

3 The NRC has an opportunity right now to do
4 the right thing, which is to admit the real long-term
5 dangers and the immediate potential dangers from
6 irradiated nuclear fuel, to stop making things worse
7 by maintaining the moratorium on new licensing and
8 license extensions, and to require protection of
9 current and future generations.

10 The NRC was part of the Environmental
11 Protection Agency protective action guides that have
12 just -- the controversial protection action guides,
13 which look at the consequences of large nuclear
14 disasters at nuclear reactors, and this would include
15 nuclear waste.

16 And under the protective action guides,
17 because the scenario could be so bad, because the
18 risks to the public could be so high, as high as one
19 in seven cancers from the exposures from the long-
20 term -- the intermediate and long-term allowable
21 contamination, our regular allowable risks that the
22 EPA has of one in a million to one in 100,000, one in
23 10,000, these are being jettisoned to allow for higher
24 risks to the public because of the real potential
25 dangers from nuclear power and nuclear waste from

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1 nuclear power.

2 There is an artificial distinction really
3 made in the EIS over just the waste and not looking at
4 the waste in the fuel pools. The material in the
5 pools is essentially waste itself. And so if you look
6 at what happened at Fukushima, maybe the fuel pools
7 didn't themselves blow up or disperse at this point,
8 but it is irradiated fuel that did that and that did
9 get dispersed.

10 So we do have living proof that this
11 material can cause unacceptable risks, and then we get
12 down to whether one considers what has happened in
13 Japan as acceptable, and of course common sense says
14 that it's not.

15 I'm going to stop there.

16 MR. CAMERON: Okay. Thank you. Thank
17 you, Diane.

18 Is Jeffry Guido here? Oh, come on up and
19 join us, Jeffry. And after Jeffrey is done we're
20 going to take a short break, give you a chance to
21 stretch and make sure that our phones are working.

22 Jeffry.

23 MR. GUIDO: Hi. I'm Jeff Guido. I'm the
24 political coordinator for the Maryland State Pipe
25 Trades Association and a member of the United

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1 Association of Plumbers, Pipefitters, Steamfitters,
2 Sprinklerfitters, and Service Techs. We build energy
3 plants, and we love nukes.

4 Some of the information gave out, that
5 63 percent of carbon-free energy in the country is
6 provided by nuclear energy, we think it should be 90
7 percent.

8 I think storage of the spent fuel is
9 certainly important, and it seems to be done in a safe
10 manner. We have had nuclear energy in this country
11 for almost 50 years. The worst case scenario was
12 Three Mile Island. Those safety checks and balances
13 worked.

14 I think we should pursue a closed fuel
15 cycle, reuse of the wasted energy, maybe provided as a
16 10-year program, same as that was used for landing on
17 the moon. What did we get out of space exploration?
18 Everyone in this room is tied at their hip to their
19 cell phone through satellite communication.

20 The economic growth, education for
21 operating these systems, world population is expected
22 to be seven billion by 2050 I believe. I don't think
23 wind turbines and solar energy are going to do it. I
24 don't know of one wind farm that provides enough
25 energy to manufacture a wind turbine.

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1 And that's pretty much the points I have
2 to make. We support nuclear energy, and I hope the
3 process continues.

4 Thank you.

5 MR. CAMERON: Okay. Thank you, Jeff.

6 We're going to take a short break. I have
7 3:35, so let's be back in five minutes at 3:40. And
8 we may start, even though not everybody is back, with
9 our speakers. And we're going to go to the phones
10 when we get back.

11 Thank you.

12 (Whereupon, the proceedings in the foregoing matter
13 went off the record at 3:33 p.m. and went
14 back on the record at 3:45 p.m.)

15 MR. CAMERON: Okay, everybody. We're
16 going to get started now. And we have an important
17 discussion note coming up from Keith McConnell, who is
18 the director of the Waste Confidence Directorate, and
19 then we're going to some people on the phone and
20 people here in the room. But this regards the impact
21 of the Government shutdown on the whole process of
22 this draft EIS.

23 Keith?

24 MR. McCONNELL: Yes, thanks, Chip. This
25 is Keith McConnell. And Diane D'Arrigo raised the

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1 question about the Government shutdown or the lack of
2 an appropriation, and what I wanted to do is just talk
3 briefly about that and what its implications are for
4 the Waste Confidence effort.

5 The Agency, the NRC is currently operating
6 on what's called carryover funding, which is funds
7 that we were appropriated in fiscal year 2013 and are
8 excess, and so we are now able to use them in fiscal
9 year 2014. Those carryover funds are expected to last
10 until the end of the week or perhaps into next week.
11 During that period of time the NRC is operating fully
12 staffed. When the carryover funds start to end, which
13 is again towards the end of this week, the NRC is
14 going to make decisions with respect to its staffing.
15 But what it will do, even after those carryover funds
16 are expended, is to maintain the staff that's
17 necessary to protect public health and safety and the
18 environment.

19 What this means in terms of the waste
20 confidence effort and our public meetings that are
21 scheduled pretty much the next month-and-a-half is
22 that there is some uncertainty as we move forward if
23 the Government is continually shut down and we lack an
24 appropriation.

25 The bottom line is the meeting out in

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1 Denver on Thursday will go forward as planned. The
2 meetings that are planned for California next week in
3 San Luis Obispo and Carlsbad, California are subject
4 to cancellation should the carryover funding move
5 over, or basically we run through that carryover
6 funding. The decisions with respect to those
7 California meetings will be made towards the end of
8 the week and it's our intent in the Directorate to
9 communicate whatever that decision is probably on
10 Friday through our WC outreach email listing, the NRC
11 Web site and through our Office of Public Affairs and
12 their liaisons in the regional office.

13 So that's pretty much it. So thank you,
14 Chip.

15 MR. CAMERON: Okay. Thank you, Keith.

16 MS. D'ARRIGO: What about after
17 California?

18 MR. McCONNELL: Yes, after California it
19 is all dependent on whether the Government has an
20 appropriation, or the NRC has an appropriation. If we
21 don't have an appropriation, those meetings would also
22 be canceled.

23 MR. CAMERON: And again, for those
24 meetings it will be on the Waste Confidence Web site,
25 whatever's going to happen.

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1 MR. McCONNELL: Right, and we'll contact
2 people through our WCO outreach email listing. If
3 you're not on that listing, I would suggest that you
4 talk to one of the NRC staff here today and get on
5 that listing.

6 MR. CAMERON: Okay. This is an important
7 issue, so I don't want to shorten anything. Tim, do
8 you have a question on this?

9 MR. JUDSON: Yes, I do.

10 MR. CAMERON: All right. Go ahead. This
11 is Tim Judson.

12 MR. JUDSON: Okay. Thanks. Tim Judson
13 with Nuclear Information and Resource Service. Just
14 wanted to clarify. When you say canceled, do you mean
15 that those meetings just won't occur at all, or will
16 they be rescheduled for a later date?

17 MR. McCONNELL: This is Keith McConnell.
18 I anticipate that they would be rescheduled, but given
19 the fact that we have pretty much the next six weeks
20 fully planned, how we would reschedule those and what
21 would happen in the longer term is basically uncertain
22 at this point. Once we get an appropriation, we'd
23 just have to recalibrate and basically replan what we
24 intended to do. And part of that would be probably
25 speaking with the NRC Commissioners, too.

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1 MR. CAMERON: Okay. Thank you. We're
2 going to go to people that we know are on the phone
3 now, and one is Gail Snyder and another is Niki
4 Vandell, and the third is Leslie March.

5 And, operator, could we have Gail Snyder?

6 And all of you out there, if you want to
7 get in the queue, press star 1.

8 OPERATOR: Okay. I do have Gail Snyder's
9 line now open.

10 MS. SNYDER: Hi, my name is Gail Snyder.
11 I'm calling from Illinois. Can you hear me clearly?

12 MR. CAMERON: Yes, very clear.

13 MS. SNYDER: Well, I'm calling from the
14 state which has the most nuclear reactors and the most
15 stored nuclear waste from those reactors of any state
16 in the country.

17 I just want to say I have a comment on
18 maximizing the opportunity for public comment. With a
19 total of three hours allowed at each of these 12
20 hearings for public comment, these meetings, minus the
21 time for introductions, protocols, NRC presentations
22 and a break, which took today over 30 minutes, the
23 whole country has less than 30 hours total of publicly
24 facilitated commentary time spread across the entire
25 nation. Two of the twelve meetings, the first and the

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1 last, will have teleconference Web casting available
2 to the public to listen and make commentary. This is
3 not maximizing the opportunity for public comment.
4 This is not a thorough or comprehensive process as the
5 nuclear industry's spokesperson stated earlier, and
6 certainly if any meetings are canceled due to the
7 Government shutdown and not rescheduled, that would
8 make it even worse.

9 It's my contention that the comments made
10 at a public hearing process of any governmental
11 hearing is an important component in community
12 involvement and transparency that has a different but
13 equally important role from the submission of written
14 comments. Publicly made statements allow for the
15 discourse on the topic to be shared in real time that
16 facilitates immediate feedback and stimulates
17 conversation and thought among the participants of the
18 community. If this process were not important, all
19 comments would be submitted in written form.

20 So I would just like to submit to you that
21 many people would like the opportunity to participate
22 in all 12 of the public hearings, or public hearings
23 that don't currently have the Web casting
24 teleconference option available. I would like to
25 request that the NRC facilitate all 12 meetings or as

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1 many as possible with the teleconferencing Web
2 casting, and I don't think that a task is an
3 unreasonable request to ask of NRC. You're already
4 familiar with this process. I know it's not perfect,
5 but I know you're familiar with it and I don't think
6 it's unreasonable to request. Thank you.

7 MR. CAMERON: Okay. Thank you, Gail. You
8 had some good points there. And all I would say is
9 that at this meeting and at any of the other public
10 meetings the NRC is going to stay until we hear from
11 everybody who's signed up to comment, this one being
12 in the room and by phone.

13 And the second thing I would add is that
14 on November 14th the NRC, as now scheduled final
15 meeting is also going to provide access by phone to
16 people. And I'll just leave it at that and also that
17 we take note of your point on presentations and all of
18 that. So thank you very much, Gail.

19 MS. SNYDER: Thank you.

20 MR. CAMERON: Okay. Niki Vandel?

21 MS. VANDEL: Hi, can you hear me?

22 MR. CAMERON: Yes.

23 MS. VANDEL: Right on. First off,
24 excellent job. And I was very grateful to hear that
25 the NRC has taken the precaution of creating a slush

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1 fund. Why the control of our nuclear sites is not -
2 - what is the defined term -- an essential whatever?

3 I just wanted to say this: If we could
4 get the definitions commonly found in the dictionary
5 for "waste" and "confidence," I think we could get to
6 the root of the matter here that we're dealing with,
7 because there's a lot of words going around that a lot
8 of meaning is getting lost. And the stories that
9 we're going to script through this public comment time
10 is very important.

11 I am a stakeholder. I don't represent
12 anybody but myself as a mother of my daughter and
13 hoping that she's going to have grandbabies one day
14 that it may or may not be affected by the nuclear-ized
15 water we already have. And now we're creating a
16 situation where we do not have waste confidence
17 because we do not have containment of the waste we
18 already have. And if we ignore that -- and I don't
19 know why the lawyers haven't already gone to the court
20 and said we need more time because the president of
21 Japan has said Fukushima is not contained. That's
22 where I am.

23 Anyway, hope to see you guys in San Luis
24 and here in California. Thank you.

25 MR. CAMERON: Okay. Thanks, Niki. We'll

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1 look forward to that also.

2 And we're going to go to Leslie March.
3 And for everybody in the room or on the phones, when
4 you do speak, if you could just tell us your
5 affiliation, if appropriate, we'd appreciate that.

6 And, Leslie, are you on?

7 MS. MARCH: Yes, I am.

8 MR. CAMERON: Great. So please talk to
9 us.

10 MS. MARCH: Okay. Thank you. Good
11 afternoon. My name is Leslie March. I live in
12 Hillsboro, Oregon and I am a member of the Sierra
13 Club's Nuclear-Free Core Team, but the following is my
14 personal comments. We will be submitting official
15 comments for the Sierra Club at a later date. I want
16 to thank you for giving me the opportunity to speak,
17 and I just wanted to kind of reiterate some of the
18 things that Gail was talking about in the beginning.

19 I'm very concerned about the entire
20 process of this EIS. The NRC seems to be in a hurry
21 to proceed to the end of the process without giving it
22 careful review. The public meetings are not being
23 held near reactor communities with the exception of
24 the California meetings. The public was not given
25 enough notice for the first meetings. Those of you

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1 who have seen the GEIS, you know, we could use it for
2 a doorstep, and it's been less than 30 days since it
3 was submitted to the public for us to read. So I want
4 to reproach the NRC for trying to rush this process.

5 I wanted to state emphatically, contrary
6 to one of the people who went before me, I am not
7 crazy about nukes. And I'm not confident in the
8 Nuclear Regulatory Commission to site a permanent
9 repository, particularly in this 25 to 30-year time
10 frame. I really would like to see this Environmental
11 Impact Statement looking at alternatives, alternatives
12 like not making the waste at all.

13 My background is a financial professional
14 and I am concerned that the true costs of the nuclear
15 fuel cycle are not discussed in this document. The
16 long-term social and monetary costs of the creation of
17 radioactive waste are not evaluated, nor are the costs
18 considered of potential accident or incident relating
19 to spent fuel like a pool fire, pool leakage, long-
20 term cask storage failure or transportation of
21 radioactive waste. In addition, the costs of handling
22 the existing on-site waste and restoration of the
23 lands decimated by mining were ignored.

24 In my case I am particularly concerned
25 about the generic aspects that the NRC wants to bring

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1 to this process. Each reactor site has its own unique
2 signature and needs to be treated individually. In my
3 case the Columbia Generating Station is in the
4 agricultural center of Washington State. An accident
5 threatens \$9.5 billion worth of products in
6 Washington, and another \$6 billion in Oregon. This is
7 besides having the populations of Seattle, Spokane,
8 and Portland downwind based on what direction the wind
9 blows.

10 We also have the risk of contaminating the
11 Columbia River, a national treasure, and we have the
12 double jeopardy of having the Hanford Reservation next
13 door where we have confidence in particular storage
14 tanks that are now leaking. Safe storage of spent
15 fuel needs to consider all of these risks for each one
16 of the individual sites. There are also seismic and
17 flood issues that need to be considered.

18 I'm asking that the EIS thoroughly discuss
19 spent fuel impacts for each reactor, following NEPA by
20 considering alternatives for creation of future waste,
21 including the alternative to continue the moratorium
22 on relicensing and licensing reactors with the goal of
23 phasing out all reactors by 2020 or sooner. If the
24 Germans can do it, we can.

25 The EIS also needs to include an

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1 investigation of the carbon effects of the fuel cycle.
2 As we continue to try to decrease greenhouse gases in
3 the United States, continuing to mine, mill, and
4 process uranium is a contradiction. In fact, one of
5 the most dangerous chemicals that depletes the ozone
6 layer, freon, has been used in converting uranium to
7 fuel. Construction and decommissioning nuclear power
8 plants are also high carbon emitters. The EIS needs
9 to look at renewables and energy efficiency as being
10 an alternative to creating more nuclear waste.

11 In conclusion, I'm proposing that the EIS
12 meet its NEPA requirements by offering alternatives,
13 considering each reactor site separately, and to
14 evaluate all of the costs involved, not just how much
15 it will cost to do an EIS, which is what it says right
16 now.

17 And also, one of the things that was
18 mentioned earlier, one of the NRC officials mentioned
19 a statement of no significance. This particular
20 statement should never be considered in this case.
21 Thank you.

22 MR. CAMERON: Okay. Thank you. Thank you
23 very much. Let's stay with the Sierra Club and go to
24 Steven Sondheim. And then we're going to go to Marvin
25 Lewis and then we're going to come back to people in

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1 the room here in Rockville.

2 So, Steven, are you on?

3 MR. SONDEHEIM: Okay. Hi, can you hear me?

4 MR. CAMERON: Yes.

5 MR. SONDEHEIM: Oh, good. Thank you. I'm
6 sorry I wasn't on the phone when you called on me
7 before.

8 I'm Steven Sondheim. I live in Memphis,
9 Tennessee in and around TVA that has about five or six
10 nuclear power plants, some of which are over budget.
11 I'm also with the Nuclear-Free Campaign of the Sierra
12 Club. I want to say something quickly about carbon-
13 free and then I want to go on to some questions.

14 The nuclear cycle is not carbon-free at
15 all. Considering the entire cycle, like Leslie just
16 said, it makes a significant contribution. And we've
17 analyzed that if some of the money going into the
18 nuclear program were to go into a fast-paced
19 efficiency and renewable program, we could reach a
20 carbon-free scenario much, much quicker.

21 Okay. Well, regarding the waste
22 confidence, I want to ask the NRC to consider can they
23 definitely state with confidence that there is no
24 danger with our current ways of dealing with
25 radioactive waste? And I don't think so. And is

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1 there currently a safe way to store the waste? We
2 should wait until a safe method exists, if ever. And
3 I'm not even sure, and none of us are, that deep
4 geological storage is safe.

5 I think the assumption is being made that
6 if something can be found, that's it, we're done. I
7 don't think so. I think that needs to be analyzed as
8 well. Putting it down, you know, in various places
9 for tens of thousands of years. All the places we've
10 found so far have not passed muster. What is the
11 muster? So I don't think this assumption that some
12 day we might be able to find that is confidence-
13 producing at all. It's like a pig in a poke. It's
14 like jumping with no place to land.

15 And another aspect is that there doesn't
16 seem to be a way to currently isolate radioactive
17 waste from effects on life, on the biosphere. So it's
18 not confidence-producing to say they will find one. I
19 think it's a false premise in the EIS to base the
20 future on something we don't have yet. Okay. Thank
21 you very much.

22 MR. CAMERON: Thank you, Stephen.

23 And, Marvin Lewis. Marvin, are you on the
24 phone with us?

25 MR. LEWIS: Correct.

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1 MR. CAMERON: Okay.

2 MR. LEWIS: Can you hear me?

3 MR. CAMERON: Yes.

4 MR. LEWIS: Okay. Well, let me try and
5 make it fast. All right. I couldn't read through
6 this three-inch document in the time I had it, but I
7 do appreciate you sending it to me the hard copy,
8 which is a heck of lot easier to manipulate; however,
9 I did use the search engine on the computer to look
10 for things like Stuxnet cyberattack, Carrington event.

11

12 Look, there's nothing in there. You start
13 unloading this fuel and you have a problem with your
14 computers or with your smart grid because of a cyber
15 attack and you're down. Carrington Event, also known
16 as coronal mass ejection from the sun, if it hits.
17 Okay. It hasn't hit hard in 150 years. That means
18 it'll never hit hard? I doubt that. I'd like to see
19 a little more work on coronal mass ejection and how it
20 will affect smart grids and how we're going to be in
21 the middle of unloading when the smart grid goes down.

22 I have a problem because there's very
23 little about local data. We have a problem in
24 Philadelphia at bridges. Have a problem. We are
25 trying our best and we're doing a very good job of

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1 bringing I-95 up to date, but it's a big, big highway
2 that goes through here.

3 Our emergency planning, how can I put it?
4 Well, let's skip emergency planning. I don't like to
5 say bad things about my city.

6 Emergency equipment, we got emergency
7 equipment, but let us say I hope the groups that are
8 supposed to come out from the Federal Government for
9 emergency problems do it fast.

10 Local conditions about our railroads and
11 bridges, we got a hairpin curve right on the art
12 museum a couple of blocks from midtown. And I'll tell
13 you, I hope somebody walks those tracks before a
14 trainload of nuclear waste goes through.

15 Now I'd like to talk about the metallurgy
16 of zirconium, Zircaloy, and fires. First of all, yes,
17 it's true we've been very lucky with controlling fires
18 and we've been very, very lucky with controlling fires
19 in spent fuel pools. We don't know what's going to
20 happen with these spent fuel pools, but now that we've
21 got the higher compaction due to the fact that we
22 don't have any place to put this spent fuel, the
23 radioactive waste -- and we do not really -- I have
24 looked at the data that the NRC has gotten on
25 zirconium, Zircaloy, and fires.

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1 They don't look at surface conditions.
2 They don't look at alloying, accidental alloying, or
3 alloying at the surface very much. And there's a
4 chance that instead of a small fire, we can go to a
5 different kind of fire. In other words, instead of
6 having water react with the zirconium to release
7 hydrogen and zirconium oxide, we can go to a very
8 fast, much faster fire where due to temperature and
9 pressure the zirconium can react with the oxygen and
10 air at a much, much faster rate. And I do not know if
11 that actually happened at Fukushima. All I saw in the
12 news was the roof tops heading out toward a higher
13 altitude and I do not know which kind of fire and
14 whether the higher rate of fire was actually occurring
15 there.

16 I appreciate the fact that you have your
17 data and references in the report, but the actual
18 engineering calculations, the actual computer source
19 codes are not available. Lawyers I hear call it work
20 product. But what I'm trying to say is, yes, we do
21 have very good results reported in this 2157, however,
22 the source code that generated those results, the
23 engineering calculations by hand are not available.
24 It brings a question to my mind.

25 Finally, and this is a bigger question

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1 than maybe can be answered by this thing here, end of
2 evolution. Have we already released enough
3 radioactivity into the biosphere that over the
4 centuries we may stop evolution? I'd like to see that
5 question answered. And I think every part of the
6 nuclear fuel cycle should answer for the cumulative
7 radioactive load on the human genome. Thank you and I
8 appreciate the time.

9 MR. CAMERON: Thank you very much, Marvin.

10 We're going to go to people in the
11 audience now. And first we're going to go to Erica
12 Gray, then Jerry Bonanno, Tim Judson, and Kenneth
13 Curtin.

14 Erica?

15 MS. GRAY: Hello and my name is Erica
16 Gray. I live in Henrico, Virginia. I'm a mother, I'm
17 a grandmother, I'm an organic home grower and I have
18 been participating in a lot of the NRC meetings, the
19 phone conferences over the Waste Confidence Genetic
20 Environmental Impact Statement, as well as I live 33
21 miles from North Anna Nuclear Power Station that was
22 knowingly built on a fault line.

23 Fukushima happened in 2011 and a few
24 months later Virginia experienced its 5.8 earthquake
25 that exceeded the reactor's design and actually

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1 knocked the plants off line. When we're talking about
2 storage, our concrete cask moved one to four inches.
3 Luckily, there was no release, but it does go to show
4 that there is a problem with stability.

5 We don't know how many more earthquakes we
6 will have in Virginia, let alone the rest of the
7 country, so I'll stay more specifically with Virginia.
8 After the earthquake we experienced at least in one
9 well at North Anna a level of tritium in a well that
10 exceeded EPA regulations for drinking water.

11 It's very difficult to get information
12 pertaining to the plant. It's very discouraging that
13 while we're talking about this important document in
14 12 meetings that we hold across the country that
15 Dominion is full steam ahead looking at putting the
16 third reactor at North Anna, even prior to any of this
17 being done. Supposedly that's legal.

18 First of all, I wanted to mention on the
19 phone the other day with Waste Confidence talking
20 about these meetings we were told that only the first
21 and the last meeting were going to be Web cast and
22 teleconferenced, and I think that's not democratic and
23 it's not fair for the rest of the people in the
24 country to hear what's going on in their communities.

25 I also don't like the idea that after the

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1 12 meetings are done, from what I understand, this
2 Waste Confidence Generic Environmental Impact
3 Statement will be finalized. And so the public won't
4 have another chance at all to comment on any revisions
5 or anything that's done, and I think that's really,
6 really wrong. So really transparency isn't the real
7 good rule here that we're going by.

8 I find it very difficult to find most of
9 the information when I'm looking for it. So after the
10 earthquake and Fukushima I became very aware. I'm
11 getting ready to turn 50 years old. I have obviously
12 lived through Three Mile Island, Chernobyl, and now
13 Fukushima. And really the media hasn't really covered
14 a lot except for here recently with some leaking
15 tanks. And we're talking about a global issue.

16 So when it comes to waste confidence, one
17 of the gentlemen here mentioned it's a clear path to
18 generic waste confidence. I don't understand. It's
19 not very clear at all actually. And dealing with
20 North Anna is very not site-specific. So I have
21 problems with this.

22 I went through the documents and every
23 time there was a risk -- you know, summary of
24 environmental impacts on continued storage at reactor
25 storage, reactor storage, small, small, small, small.

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1 You know, away from storage. You know, away from
2 reactors, small, small, small. You know, no water.
3 You know, everything's small.

4 But you know, I've been attending these
5 meetings for two years between the North Anna issues
6 and when we restarted there without actually doing a
7 lot of checking. Everything's always downplayed. I
8 mean we're talking about some serious issues here. I
9 mean lessons learned from Fukushima. I went to one of
10 the Blue Ribbon Commission meetings and these are
11 serious issues. It seems like this document is so
12 generic, it was put together in a rush.

13 The only thing that I'll have to comment
14 on that at the last televised meeting with Muniz and a
15 panel that I heard and read the testimony of David
16 Lochbaum of the Union of Concerned Scientists, and I
17 really was amazed when I saw his written documents and
18 testimony because, you know, it showed if our spent
19 fuel pools, which are by the way overloaded and to the
20 brim -- if we were to have an accident with them as
21 filled as they are, the consequences would be just
22 outrageously horrible. I'm not talking about, you
23 know, this 10-mile radius that the NRC puts as an
24 emergency evacuation zone, which by the way is
25 ridiculous. More than hundreds of miles.

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1 So, you know, eliminating some of the
2 spent fuel; and I'm not talking about some of the
3 hotter fuel, and taking them out of the casks and
4 taking them out of the pools and putting them in the
5 dry storage sounds like probably the best that we can
6 do to lessen the consequences of a drain down, or of a
7 fire, or of an earthquake. But, you know, I'm not
8 sure if it was even addressed in this environmental
9 impact.

10 Now, I have to say that -- excuse me for a
11 minute. Me and my notes. On 9/30/13 the group PEER,
12 a federal workers' group, sues to disclose U.S. dam
13 risk to nuclear plants and has filed a lawsuit against
14 the U.S. NRC for their refusal to share information
15 with the public about U.S. dam risk. The probability
16 of a massive dam failure destroying a U.S. nuclear
17 plant is higher than the probability of the Fukushima
18 tsunami and what it contributed to the nuclear
19 disaster. The risk in place is at three dozen U.S.
20 nuclear plants. The NRC has been removing dam failure
21 risk information from public view and it was caught
22 suppressing a critical report on the dam failure risk
23 in recent years. NRC engineering staff went public
24 with this incident.

25 MR. CAMERON: And, Erica, do you have

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1 something on these papers that you want to show us?

2 MS. GRAY: Yes. No, actually I have for
3 display.

4 MR. CAMERON: Because we're going to have
5 to wrap it up, but I don't want you to --

6 MS. GRAY: Okay. Well, I just wanted to
7 mention that in light of the earthquakes that we've
8 seen in the past besides the Fukushima -- you know,
9 the 7.7 the other day in Pakistan quake actually
10 created an island. I'm sure most of you all heard
11 that. So I really think that what we are seeing is
12 we're seeing a down-playing in the seismic activity in
13 dealing with storage and the risk. I mean we have
14 some serious risk here. And so I think it's important
15 that more of that is looked at.

16 MR. CAMERON: Okay.

17 MS. GRAY: And if you would please --

18 MR. CAMERON: And I think Diane is here to
19 help you with the posters. Ah, okay.

20 MS. GRAY: Essentially it's time to stop
21 the nuke con game. Stop producing this waste that we
22 have nowhere to put it. Never guaranteed safety. The
23 plan -- and the public like myself, the average person
24 wants to see a plan where we start decommissioning
25 them, taking the ones off fault lines.

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1 Look at Indian Point. Twenty million
2 people in a 50-mile radius that there's no way you can
3 evacuate.

4 MR. CAMERON: Okay. Thank you very much
5 for the visual and the comments.

6 And thank you, Diane.

7 All right. So Jerry, Jerry Bonanno.
8 We're going to Jerry and then we're going to go to
9 Tim, Tim Judson, and then to Kenneth Curtin. This is
10 Jerry.

11 MR. BONANNO: Thanks, Chip. My name is
12 Jerry Bonanno with the Nuclear Energy Institute. I
13 want to thank the NRC for providing this opportunity
14 to comment. As Ellen Ginsberg mentioned earlier,
15 we'll be providing comprehensive written comments
16 later in November and my comments today, like hers,
17 are meant to be supportive and consistent with those
18 written comments.

19 I'm going to focus on a more narrow, but I
20 think fundamental portion of the staff's analysis, and
21 that's the definition of the proposed action in
22 consideration of alternatives, particularly the
23 staff's decision not to consider the cessation of
24 reactor licensing or operation or the imposition of
25 additional requirements as alternatives to the

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1 proposed action.

2 The NEI agrees with the NRC's definition
3 of the proposed action as promulgation of a rule that
4 generically addresses the environmental impacts of
5 used fuel storage making such consideration largely
6 unnecessary in individual licensing proceedings. We
7 also agree with the NRC's characterization of the
8 alternatives to the proposed action which generally
9 consists of different methods of assessing the impacts
10 of used fuel storage during a continued storage
11 period.

12 As the Agency has consistently clarified,
13 several people have mentioned today the waste
14 confidence rulemaking is not a licensing decision,
15 does not authorize construction or operation of
16 nuclear power plants or the continued storage of used
17 fuel at any specific site. Importantly the staff has
18 correctly concluding that stopping nuclear reactor
19 licensing or operations is not an alternative required
20 to be addressed under NEPA in the waste confidence
21 proceeding. It's not an alternative that serves the
22 purpose of the present rulemaking, which are: (1) To
23 improve the efficient of the NRC licensing actions
24 through generic consideration of environmental impacts
25 of continued storage; (2) to capture the review in a

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1 single comprehensive document; and (3) to respond to
2 the court's remand.

3 Also, consideration of halting reactor
4 licensing or operation wouldn't further the NRC's
5 ability to consider analyzing the environmental
6 impacts of extended storage of used fuel at or away
7 from reactor sites, nor does it necessarily reflect
8 the environmental benefits of continued operation of
9 nuclear power plants.

10 Cost and benefits and alternatives to
11 nuclear plant licensing, including not issuing
12 licenses or license renewals, is fully considered in
13 the environmental reviews for individual plants; that
14 is, consideration of not licensing a plant or allowing
15 continued operation under a renewed license is
16 appropriately addressed in the NEPA reviews conducted
17 when licensing those specific facilities. As
18 clarified in the Statement of Consideration published
19 with the proposed rule, although the Waste Confidence
20 EIS may inform these analyses, it's not the
21 appropriate context to consider these types of no-
22 action alternatives.

23 Finally, I think it's worth noting that
24 more than 35 years ago the 2nd Circuit Court of
25 Appeals in NRDC v. NRC confirmed that halting reactor

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1 licensing until definitive findings on repository
2 safety are reached, it is simply not required by the
3 Atomic Energy Act.

4 With respect to the alternatives involving
5 imposition of new or additional regulatory
6 requirements, NEI supports NRC's conclusion that
7 imposition of such requirements is outside of the
8 scope of the proposed action, which again is to
9 explore alternatives that improve the efficiency of
10 the licensing process through generic examination of
11 safety and environmental implications of continued
12 storage.

13 We anticipate that the NRC will continue
14 to assess the adequacy of its current framework for
15 regulating safe storage through its existing processes
16 outside of this rulemaking. Several examples have
17 been mentioned today, including the ongoing work on
18 the ISFSI security rulemaking and staff's recent work
19 on spent fuel pool safety in the Spent Fuel Pool
20 Study.

21 So in sum, we commend the NRC for its
22 efforts to explain the context of the current waste
23 confidence proceeding and we encourage the Agency to
24 continue to keep that context in mind as the process
25 continues and we look forward to you continuing to

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1 participate in these public meetings. Thanks.

2 MR. CAMERON: Okay. Thank you. Thank
3 you, Jerry.

4 And Tim Judson is coming down to join us,
5 and he's with Nuclear Information Resource Service.
6 then we'll go to Kenneth Curtin. This is Tim, Tim
7 Judson.

8 MR. JUDSON: Hello, everyone. Thanks for
9 the opportunity to speak. Like Chip said, my name is
10 Tim Judson. I'm the associate director with the
11 Nuclear Information and Resource Service. I'm also
12 the president of the board of Citizens' Awareness
13 Network, which is a grassroots nuclear watchdog group
14 in the Northeast.

15 And, you know, NIRS has obviously a lot of
16 input to provide on the Waste Confidence rule. NIRS
17 has been one of the primary nuclear watchdog groups in
18 the U.S. for the last 35 years. We've seen the
19 evolution of this regulation throughout that time and
20 we believe obviously that the Waste Confidence rule
21 should be withdrawn and want to provide our thoughts
22 on that.

23 My comments today will primarily be
24 confined to addressing the rule itself. We'll have a
25 lot more detailed input on the generic environmental

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1 impact statement, which will be delivered in written
2 form and verbally at the November 14th meeting, but
3 want to address, you know, really the proposed action,
4 which is to essentially re-institute the Waste
5 Confidence rule.

6 And, you know, we believe that this
7 regulation is completely out of date and out of touch
8 with reality, and this is, you know, with no
9 disrespect to the work of the NRC staff that have
10 prepared these documents and the *Federal Register*
11 notices of the proposed action. You know, I think
12 what we've seen or what I've experienced over the last
13 several weeks in these sort of public input meetings
14 in various settings has been some disconnect between
15 the public's comments with regard to NRC actions and
16 the reception of those comments by NRC staff showing
17 that the public is being overly critical of their own
18 work. I want to be clear that you know, in reference
19 to comments today we're talking about the actions of
20 the Commission and the Commission as an agency, not
21 the work of individual staff.

22 But to this point I'm to address the Waste
23 Confidence rule. This rule has only ever served one
24 purpose, which has been to streamline the licensing
25 process for nuclear facilities and particularly

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1 nuclear power plants, and in fact that's stated very
2 clearly in the documents that we're here to comment on
3 today. And I want to, you know, sort of begin with
4 the stated purpose of the proposed action and the
5 Waste Confidence rule. And I'm reading from the
6 generic environmental impact statement, although
7 nearly verbatim statements are made in the other
8 documents as well.

9 "The purpose and need for the proposed
10 action are threefold: (1) To improve the efficiency
11 of the NRC's licensing process by generically
12 addressing the environmental impacts of continued
13 storage; (2) to prepare a single document that
14 reflects the NRC's current understanding of these
15 environmental impacts; and (3) to respond to the
16 issues identified in the remand by the court in the
17 New York v. NRC decision."

18 Now, to address these it was entirely
19 unnecessary for the Commission to go back and re-
20 institute the Waste Confidence rule. First of all,
21 the second stated purpose here, to prepare a single
22 document that reflects the NRC's current understanding
23 of nuclear waste storage, doesn't require a
24 rulemaking. That could be done in any other kind of
25 technical document or environmental impact statement.

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1 And the third one, to respond to the
2 issues identified in the remand by the court, the
3 court did demand that the NRC do a more thorough
4 credible evaluation of the consequences of nuclear
5 waste storage after a reactor license expiration.
6 That doesn't require the reinstatement of a Waste
7 Confidence rule. The court was clear that it didn't
8 say that the NRC shouldn't do that, or wouldn't be
9 allowed to do that, but it's certainly not a necessary
10 implication of the court rule.

11 And in fact the very basis, the very
12 underpinning for having a Waste Confidence rule has
13 essentially been invalidated, you know, by reality at
14 this point. I mean the very term "waste confidence"
15 is based on a notion that the NRC is confident that
16 nuclear waste has a solution. And there's really no
17 policy basis or factual basis for that as a matter for
18 streamlining the licensing process of nuclear reactors
19 in this country at this point.

20 The history of how we arrived at this
21 point is well summarized in the documents that we're
22 here to comment on and going back to the passage of
23 the Nuclear Waste Policy Act, which initially mandated
24 that the Department of Energy site or come up with
25 recommendations for siting two repositories in this

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1 country for the permanent disposal of nuclear waste.
2 And over a few years it became clear that that was too
3 hot of a political potato for the nation to manage and
4 the law was revised to require the siting of one
5 repository and cap the amount of waste that could be
6 stored in that repository until a second one could be
7 sited.

8 And then a few years later when it became
9 more clear that that was going to be such a heavy
10 political lift, you know, the requirement for DOE
11 recommending a second repository site was stripped
12 entirely. And so we were left with one proposed site,
13 Yucca Mountain, capped at a capacity of 70,000 metric
14 tons of nuclear waste. And that's been the process
15 where we've been stuck until it became clear that the
16 Department of Energy needed to withdraw its
17 application for a license because the facility was too
18 controversial, would not have the political support
19 necessary, and there were massive technical problems
20 with the site.

21 So we arrive at 2010 and the Federal court
22 case that's filed that ultimately went out and forced
23 the NRC to withdraw the Waste Confidence rule as it
24 was revised after the demise of Yucca Mountain.
25 We're, you know, 60 years into the nuclear experiment

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1 and we've not been able to site a single repository in
2 this country to store nuclear waste. And with respect
3 to, you know, the statutory limit on the capacity of
4 even the first repository at this point of 70,000
5 tons, according to the generic environmental impact
6 statement that amount of waste is already being stored
7 at reactors across the country. So we've already
8 filled the first repository before it's even been
9 built.

10 And so now going forward with the licenses
11 the NRC has already issued, based on the estimate in
12 the GEIS that we generate 2,000 metric tons of spent
13 fuel every year in this country going forward, we've
14 essentially already filled the second repository if
15 its to be built to the same capacity. So all the
16 licenses that would be issued going forward would be
17 essentially for what we must presume at this point
18 would be a third repository, and the Nuclear Waste
19 Policy Act has never even contemplated building a
20 third repository, even though we know if we generate
21 that waste we're going to need to do something with
22 it.

23 So, but the basis on which the NRC would
24 reaffirm a Waste Confidence rule for issuing new
25 licenses going forward is completely unrealistic and

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1 doesn't speak to the reality. And in fact, you know,
2 in the proposed or the considered alternatives to the
3 proposed action the first one is taking no action, not
4 re-instituting a Waste Confidence rule. And what's
5 the consequence of that? Not that the NRC couldn't
6 license reactors anymore, as is its mandate under the
7 Atomic Energy Act, but just that it would have to
8 evaluate the impact of generating nuclear waste at
9 each and every one of those proceedings. And NIRS
10 feels that that is the appropriate course of action to
11 be taken. We don't know what to do with this waste.
12 There's no guarantee that there's any way to dispose
13 of it and the risks that have been identified are so
14 great that that would be the best course of action.

15 I do want to make one final point, which
16 is to the assessment of risk, you know, in this
17 rulemaking. And one of the fatal flaws in what's been
18 proposed, you know, in the discussion of risk that
19 we've been having today is that the risk is evaluated
20 in a generic environmental impact statement that is
21 going to be used to streamline the licensing process
22 of an unknown number of facilities that could be
23 licensed under it. The risk that's assessed is for a
24 single facility.

25 And as I assume from the answers I got to

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1 my earlier question today about how the risk was
2 calculated, whether it was based on a sum total of all
3 of the potential causes of a spent fuel pool fire in
4 the 60 years post-license, it seems clear that the
5 risk that's been assessed by the NRC staff doesn't
6 even deal with the potential consequence of the
7 rulemaking itself, but only of licensing each
8 individual facility. And that seems completely, you
9 know, irresponsible if the Agency moves forward on
10 that basis.

11 MR. CAMERON: Okay, Tim. Thank you.
12 Thank you very much. And thanks for tying that last
13 point to your question from before.

14 Kenneth, Kenneth Curtin? And please tell
15 us your affiliation and everything, Kenneth.

16 MR. CURTIN: Of course. My name is
17 Kenneth Curtin. I'm here on behalf of the Clean and
18 Safe Energy Coalition, also known as CASEnergy. The
19 CASEnergy Coalition is a large national grassroots
20 organization that brings people from business,
21 academic, environmental, labor, consumer, and other
22 advocacy groups together. Our members support the
23 increased use of nuclear energy to ensure an
24 environmentally clean, safe, affordable, and reliable
25 source of electricity.

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1 Now, I'd like to start by thanking the NRC
2 for holding this public hearing today, and
3 particularly the hard work that the staff has done and
4 is doing. It's been a long afternoon and I appreciate
5 the opportunity to speak.

6 It's important that we make sure that
7 nuclear energy facilities across the country are
8 allowed to do what they've been doing, and that is
9 producing much needed clean, safe, and efficient
10 electricity. I am here to express my personal support
11 and confidence in the storage of spent nuclear fuel
12 onsite at nuclear facilities.

13 The industry has shown over the course of
14 decades that it is committed to the responsible, safe
15 and secure storage techniques onsite. And we all know
16 that onsite storage was never intended as a permanent
17 solution, but we also know that the industry was gone
18 to great lengths to make on-site storage a safe and
19 secure process. These structures meet the rigorous
20 requirements that the NRC has already laid out and the
21 industry has invested billions of dollars and
22 thousands of man hours over the last few years in
23 making these facilities safe and secure.

24 In addition to a commitment to the safety
25 and secure storage onsite of spent fuel, the industry

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1 is also a vital part to securing our future
2 environmental health. Just last week the
3 Intergovernmental Panel on Climate Change, the IPCC,
4 released their updated executive summary on climate
5 change and they found with 95 percent confidence that
6 humans are behind climate change. The report also
7 found that the surface temperature is likely to rise
8 by 1.5, or in two cases more than 2 degrees Celsius,
9 which is considered beyond tolerable and into the
10 danger zone by the end of this century.

11 Nuclear energy provides 19 percent of our
12 electricity, but more than two-thirds of our
13 emissions-free technology. This means that nuclear
14 energy provides more clean air energy than every other
15 source of emissions-free technology we have right now.
16 At a time when we're looking at how we can address the
17 threat of climate change, nuclear energy is already
18 our best ally in this fight. Not only is it the
19 largest source of clean-air energy, it's an extremely
20 reliable form of baseload, always-on power.

21 As the NRC continue these series of public
22 hearings I would just like to reiterate my support for
23 an industry that has shown it can safely and securely
24 store spent fuel onsite and has shown this for
25 decades. While other sources of energy pump harmful

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1 greenhouse gases, sulfur oxide, nitrogen oxide, and
2 mercury into the air, nuclear energy doesn't emit any
3 of these. Rather, the nuclear energy industry has
4 shown that it can safely, securely, and cleanly store
5 spent fuel onsite. As the NRC considers this and
6 future issues, I would encourage them to think about
7 what it can do to strengthen our nation's commitment
8 to clean-air technology. Thank you for your time.

9 MR. CAMERON: Okay. Thank you. Thank
10 you, Kenneth.

11 Jeremy Cohn. Jeremy is going to join us,
12 and then we're going to go to Allison Fisher and Evan
13 Lapiska. Then we're going to go to the phones, and
14 then we're going to come back to David Blee and Wie-Wu
15 Chao.

16 MR. COHN: Thank you. Thank you for this
17 opportunity to speak, and I just wanted to echo
18 everything that the previous speaker mentioned. I
19 couldn't agree more.

20 My name is Jeremy Cohn and a lot of people
21 today have spoken about the impact on future
22 generations, so as a member of the sort of future
23 generation, here I am.

24 I work for a company called MNES. My
25 company supplies services and technologies for the

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1 U.S. nuclear industry. We're also the licensing agent
2 for the US-APWR, the next generation nuclear plant
3 currently under review by the NRC for design
4 certification and for construction and operations
5 licensing.

6 And, you know, I want to talk about
7 catastrophic climate change, because honestly we have
8 decisions to make as a country. Are we willing to
9 live in a world that is beset by unmitigated climate
10 change? Are we ready to cope with the droughts, ocean
11 acidification, collapsing crop yields, extreme weather
12 events, species extinctions, and mass displacement of
13 climate refugees? Clearly we are not prepared as a
14 country or a society to deal with those sorts of
15 challenges that will be brought by catastrophic global
16 climate change.

17 As has been mentioned, the reality is that
18 two-thirds of all the clean electricity produced in
19 the United States comes from nuclear energy. Combined
20 nuclear and hydroelectricity provide 87 percent of
21 non-greenhouse-emitting electricity in the United
22 States, and yet of the past 30 years neither of these
23 sources has seen any real meaningful new construction.
24 And a lot of that is due to the fact that
25 hydroelectricity has been hindered by a lack of viable

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1 new capacity and the fact that nuclear has been
2 hindered by obstinate opposition.

3 What has been so completely obscured is
4 the simple truth that nuclear energy is the greatest
5 energy technology for environmental stewardship.
6 There's no source of energy with less impact on human
7 health or less impact on the environment, and that's
8 born out in this Waste Confidence GEIS. And I would
9 encourage anybody to compare the supply chains and the
10 mining techniques required for the construction of
11 wind turbines and solar panels and the amount of
12 materials consumed to those used in a nuclear power
13 plant.

14 The truth is that all of the used nuclear
15 fuel ever produced in the United States can be safely
16 stored on the same amount of space required by only a
17 handful of wind turbines. Personally, I feel that's a
18 very small price to pay for nuclear energy which is
19 and will continue to be our largest source of zero-
20 carbon electricity.

21 Furthermore, the U.S. industry has a
22 stellar record of fuel storage and transportation. As
23 has been mentioned, we stored over 1,000 casks safely
24 and the fuel pools remain safe at every site across
25 this country. Under the NRC's guidance we've

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1 completed over 3,000 successful shipments of fuel
2 without incident. The NRC oversees many times as many
3 shipments of radiological materials every year from
4 medical, research, and other industrial needs. When
5 it comes to materials management, the responsibility
6 and professionalism shown by the nuclear industry and
7 the NRC is beyond compare and they have shown that
8 they are able to responsibly manage on-site fuel
9 storage for as long as is necessary.

10 The reality is that we are making choices
11 every single day and all personally that I see are
12 political leaders and activists taking the path of
13 convenience, taking out loans against our planet to be
14 paid in the health and welfare of my family and
15 families around the world. I see people taking the
16 feel-good path admiring their own handiwork while
17 ignoring the livelihoods that they destroy and the
18 burdens that impose on the poorest Americans in the
19 form of higher electricity prices and unreliable
20 sources of electricity. Somewhere along the way it
21 seems that we've decided that self-righteousness is
22 more important than meaningful policy and we've lost
23 all context behind this important discussion.

24 Every one of us wants what's best for
25 humanity and we all wish for health and prosperity for

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1 ourselves, our country and our species. As a student
2 of science and history, I know that we all be best
3 served if we can beyond the technology tribalism of
4 the past that has plagued our energy industry for the
5 past decades. The path to preventing and mitigating
6 global climate change will be through a balance of
7 economic competitiveness and environmental concerns.
8 A costly energy policy might be successful in a single
9 country, but it will not gain influence in other
10 countries, especially among the emerging nations of
11 the world.

12 The American energy market will need to be
13 a balanced and diversified portfolio of the most
14 responsible, affordable and reliable generating
15 technologies. If we can achieve it here and
16 demonstrate to the world the effectiveness of a policy
17 of environmental responsibility and robust economic
18 health, then the United States will be the leader in
19 supplying the human expertise, advanced technologies
20 and materials to the hungry energy markets around the
21 world.

22 We are the ones who are going to have to
23 pay for the shortsighted decisions of today. Global
24 climate change is extremely dangerous and the
25 decisions that we make today as a country will have

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1 global implications. I believe in nuclear energy
2 because it is safe. I believe in nuclear energy
3 because it can protect our planet from catastrophic
4 climate change. I believe in nuclear energy because
5 it can lift us to new levels of prosperity.

6 To my generation action on climate change
7 is not a heartwarming footnote to be written on our
8 political legacy. Climate action is necessary now.
9 The seeds of growth are being planted around the world
10 and energy prosperity will lift billions out of
11 poverty, but catastrophic climate change has the
12 potential to turn that promise of prosperity into a
13 Pyrrhic victory and to reverse the hard-won progress
14 of those same people and our own families. Thank you.

15 MR. CAMERON: And, Jeremy, thank you.
16 Could you just tell us your affiliation, if you want?

17 MR. COHN: Yes, my name is Jeremy Cohn.
18 I'm with Mitsubishi Nuclear Energy Systems.

19 MR. CAMERON: Okay. Thank you very much.

20 Allison? Allison Fisher.

21 (No audible response.)

22 MR. CAMERON: Okay. How about Evan
23 Lapiska? And then we're going to two people on the
24 phones, and then we're going to come back to David
25 Blee.

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1 MR. LAPISKA: My name is Evan Lapiska.
2 I'm with the Clean and Safe Energy Coalition, or
3 CASEnergy.

4 MR. CAMERON: And, Evan, could you just
5 maybe pull the mic up a little bit so that we can hear
6 you?

7 MR. LAPISKA: Sorry about that.

8 MR. CAMERON: Thank you.

9 MR. LAPISKA: I'll repeat that. My name
10 is Evan Lapiska. I'm here with the Clean and Safe
11 Energy Coalition, otherwise known as CASEnergy.

12 I'd like to first thank the NRC for this
13 opportunity, as well as my fellow participants. It's
14 an important discussion and one that we need to be
15 having.

16 Spent nuclear fuel is currently being
17 stored onsite in well-designed, well-protected
18 facilities and storage casks. These facilities and
19 storage casks are robust structures made out of steel
20 linings and reinforced concrete walls that are several
21 feet thick. Spent fuel pool are often 40 feet deep,
22 steel lined with reinforced concrete walls and the
23 structures are built to seismic standards to protect
24 the pools. The dry storage casks where the fuel is
25 moved are also robust structures made of concrete and

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1 steel. For every 10 tons of used fuel a facility uses
2 100 tons of concrete and steel to form a structure
3 designed to protect the fuel. Over the 30 years
4 nuclear energy facilities have safely and securely
5 stored used fuel in these structures.

6 American nuclear energy is also a highly-
7 regulated industry with operating facilities subjected
8 to on-site inspections by NRC staff 24 hours a day, 7
9 days a week, 365 days a year.

10 Nuclear energy has shown it is a
11 responsible source of electricity and a valuable
12 community partner. Nuclear energy safely and cleanly
13 produces nearly 20 percent of the electric power and
14 supports more than 100,000 high-paying jobs in this
15 country. Because of nuclear energy's commitment to
16 producing affordable clean power and its commitment to
17 safely, cleanly, and securely storing spent fuel, it
18 is no wonder our communities near nuclear energy
19 facilities support nuclear energy and their local
20 facility.

21 The timely resolution of this rulemaking
22 is important for long-term power planning. This issue
23 is directly affecting relicensing of nuclear plants
24 and approval of pending construction applications for
25 new reactors, which are vital if we are serious about

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1 our commitment to a reliable, safe, and secure source
2 of electricity.

3 As the Commission continues these public
4 hearings, I would just like to reiterate that nuclear
5 energy has shown the utmost commitment to safety and
6 securely storing spent fuel. Thank you for your time
7 today and I would like to reiterate my support for
8 nuclear energy.

9 MR. CAMERON: Okay. Thank you. Thank
10 you, Evan.

11 We're going to go to the phones now, and I
12 believe we only have one person, Mike Carberry.

13 Operator, could you patch Mike Carberry
14 through?

15 OPERATOR: Okay. Mike Carberry, your line
16 should be open.

17 MR. CARBERRY: Yes, can you hear me?

18 MR. CAMERON: Yes.

19 MR. CARBERRY: Yes, thank you for allowing
20 me to speak this afternoon. I'm with the Sierra
21 Club's Nuclear-Free Campaign and I'm from Iowa City,
22 Iowa.

23 Our last three speakers who were from the
24 nuclear industry are telling us that the nuclear power
25 is clean, safe, and cheap, and they forgot to say that

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1 it was too cheap to meter. We all know that in
2 reality nuclear power is dirty, dangerous, and
3 expensive. And they're also claiming that nuclear
4 power was a climate change solution, when in fact it's
5 the most dangerous and expensive way we've ever
6 thought of to boil water. They conveniently ignore
7 the front-end energy use of nuclear power and the fuel
8 cycle and the energy needed to babysit the nuclear
9 waste for 200,000 years. So what we really need is a
10 carbon-free and nuclear-free future or we won't have
11 one.

12 Now, let's get back to why we're really
13 here. This is the Nuclear Waste EIS. And I have a
14 prepared statement here.

15 Unless and until permanent isolation of
16 existing radioactive waste from the biosphere has been
17 demonstrated, there should be no confidence in
18 licensing waste production and the NRC should stop
19 licensing new reactors and relicensing old ones. The
20 NRC does not have the authority to license making more
21 waste until it has proven that the waste can be
22 isolated from the environment. We have no current
23 working process to isolate or remove radioactive waste
24 at all levels of our environment. The NRC is too
25 closely involved with the nuclear industry to make an

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1 objective decision regarding waste generation.

2 There should be no more licensing or
3 relicensing of nuclear reactors until the permanent
4 disposal of radioactive waste becomes a proven
5 reality. Why should we condone continued licensing of
6 new reactors and renewing licenses from old reactors
7 while we're facing the dilemma of not being able to
8 safely dispose of 70,000 metric tons of commercial
9 high-level waste already generated and the 2,000
10 metric tons being produced each year by the nuclear
11 power reactors in the United States?

12 The EIS should consider and analyze the
13 option of not generating any additional waste. It
14 should consider and evaluate phasing out nuclear
15 reactors in the near future. Creating additional
16 waste when there is no identifiable solution for its
17 permanent disposition cannot be justified. There are
18 other methods of generating electricity that do not
19 generate radioactive waste.

20 Prevention and precaution. The EIS must
21 consider and analyze the variety of potential methods
22 for storing the more than 80,000 tons of highly-
23 radioactive irradiated spent fuel that is currently
24 housed at our reactors. The risk of a pool storage
25 and cask storage needs to be carefully considered.

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1 Overcrowded and irradiated and spent fuel pools is an
2 unacceptable risk to the public. The NRC should take
3 immediate action to reduce the number of fuel
4 assemblies in the water-filled pools, as well as
5 analyzing the deficiencies of the current dry cask
6 storage. New potentially less dangerous methods such
7 as hardened on-site storage, also known as HOSS,
8 should be fully evaluated in the EIS. The storage and
9 transport of high-burnup fuel must be fully evaluated
10 also in the EIS.

11 The EIS needs to consider the entire fuel
12 cycle in its scope, including the effects of mining,
13 milling, processing, transport, reactor operation,
14 decommissioning and final storage.

15 The true cost of nuclear power should be
16 assessed in detail in the EIS, including the
17 substantial front-end subsidies and the long-term
18 costs of decommissioning and management of nuclear
19 waste. Without the fuel cycle being included within
20 the scope, the EIS will be derelict in its purpose and
21 to the environment. The environmental, social, and
22 economic costs associated with the fuel cycle need to
23 be part of their report. Nuclear reactor owners and
24 operators are not fully financially responsible for
25 the disposal of their waste. Once the waste leaves

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1 the reactor site, the U.S. taxpayer is on the line for
2 any accidents and liability. These long-term hidden
3 costs must be made apparent and in full view and be a
4 full cost accounting.

5 The EIS needs to take into consideration
6 environmental justice questions such as who bears the
7 burden and who reaps the benefits? Native peoples and
8 peoples of color and those in poor communities have
9 historically been disproportionately impacted by all
10 the links in the nuclear chain from mining to
11 radioactive waste dumping. Intergenerational equity
12 should also be considered. The electricity has been
13 used or wasted in this generation, but dozens of more
14 generations to come must work to isolate it and
15 protect themselves from it.

16 The EIS must address reactor need for
17 water and consequences related to the use of that
18 water. Nuclear reactors use large amounts of water to
19 cool their reactor and to keep the fuel pool stable.
20 In California the consequences of the enormous amount
21 of water needed in the reactors for once-through
22 cooling were recognized. This led to concerns about
23 dwindling water resources that resulted in statewide
24 mandates to reduce the amount of sea water being used
25 by all the energy plants.

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1 Water is a scare commodity in many parts
2 of the United States. Global warming continues to
3 decrease the river and lake levels needed to cool
4 reactors. Having to shut down reactors while at peak
5 energy of all the hottest days of the summer adds to
6 the unreliability and safety issues of storing nuclear
7 waste in fuel pools. Water is needed in case of
8 accidents to prevent nuclear power cores and waste
9 pools from overheating and melting, releasing enormous
10 amounts of radioactivity in the air. We learned that
11 from Fukushima, that the water has gotten contaminated
12 and then is still being released into the Pacific
13 Ocean over two years after the initiation of the
14 triple meltdowns.

15 MR. CAMERON: And, Mike, could I ask you
16 to wrap up?

17 MR. LAPISKA: Sure. Yes.

18 MR. CAMERON: It sounds like from your
19 prepared statement it would be a great written comment
20 to send into the NRC also.

21 MR. LAPISKA: Okay. Just a couple more
22 things here and then I'll wrap it up.

23 The dangerous and unpredictable effects of
24 global warming on all aspects of the nuclear industry
25 must also be taken into account. I've already talked

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1 about nuclear power is not a climate change solution.

2 All nuclear reactors and reactor sites are
3 not created equal. A generic environmental impact
4 statement for evaluating waste and waste storage at
5 all reactors is an irresponsible and unscientific
6 response to the challenges posed by long-term
7 irradiated waste storage. Each reactor site has its
8 own unique environment. Stated issues can range from
9 those from being close to large population centers,
10 being in a floodplain, and having seismic issues.

11 A Generic EIS cannot paint a true picture
12 of the impacts of waste generation and storage on a
13 highly-radioactive spent fuel. Because the NRC
14 generically rules it has confidence that there would
15 be a solution for high-level nuclear waste, the
16 dangers were never allowed to be considered at each
17 site.

18 And in summary, we have no real confidence
19 in waste confidence. Thank you.

20 MR. CAMERON: Okay. Thank you, Mike.

21 Operator, could you put Maureen Headington
22 through? And then we're going to come back in the
23 room and go to David Blee.

24 Maureen?

25 MS. HEADINGTON: Hello, my name is Maureen

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1 Headington and I'm with the Stand Up/Save Lives
2 Campaign in Illinois. And I do want to say here after
3 listening to nearly every comment that I think you
4 should pay special attention to those comments that
5 come from folks such as myself who are not paid to be
6 there and be a mouthpiece for industry. I'm not sure
7 what the people from NEI are being paid for their
8 excellent job for the NEI today, or the people from
9 CASE for their excellent. I took time off from my job
10 because this is a grassroots activity on my part.

11 I do want to say that in terms of
12 transparency I want to thank you for the appearance of
13 transparency, but I think it can go far, far further.
14 I think every meeting, every hearing needs to be as
15 today's was where the public has the ability to weigh
16 in, even if it's just on their lunch hour.

17 Transparency though on the issue needs to
18 begin at the beginning, and that's with the monies
19 that are given to our elected officials by these very
20 industries that are present here today and many more,
21 the monies given them in order to stack the deck in
22 their favor. And it always the public that's on the
23 short end of it. When they keep talking about cheap,
24 what they're saying is their end of it is cheap. You
25 are asking us, the citizens, the taxpayers, to pay the

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1 loan guarantees and the subsidies that even allow
2 these things to be built.

3 And I don't know at this point if we can
4 ever turn around Congress, because if you bother to
5 look up and see what all of our elected officials are
6 on the receiving end of, it's no wonder than when the
7 votes come down, they do as they do. I would want
8 transparency in the BRC, because I didn't see an Arjun
9 Makhijani being named to the BRC. I saw John Rowe,
10 the chair of Exelon, being named to the BRC, which was
11 very self-serving.

12 So in terms of the public, I think the
13 only way we can get a fair shake, if there is one, has
14 to do with the licensing. And that's where you come
15 in. I live in the most nuclear state in the nation,
16 Illinois. And I can tell you that most people aren't
17 aware of it. They have become more recently.
18 Actually, because Braidwood, the 10 years of dumping
19 radioactive wastewater laced with tritium on that
20 community took the front page of *Chicago Tribune* and
21 people started waking up. Or more recently what's
22 going in Byron. Every time something's on the news to
23 allay fear, it's not injurious, it's not harmful. But
24 I can tell you that I personally know of the families
25 of multiple cancers in the Braidwood area. So I think

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1 that their stories need to be told.

2 Fukushima. How can you begin to put out
3 something generic and not take into account what is
4 happening as we speak? Fukushima sadly is being kept
5 out of our media. You get a little bit on it here and
6 there, or you really have to look for it on the
7 Internet, but it's a real problem. It's happening
8 now. And I would wage the electronic minds of Japan
9 where most of electronics even come from. If they
10 can't figure out how to stop it, then certainly how
11 can we?

12 We don't handle disasters well. Witness
13 *Katrina*. We did not handle *Sandy* well. It is always
14 the individual home owner and taxpayer. And in the
15 case of nuclear, your home owner's insurance will not
16 cover you on nuclear disaster. So in terms of what
17 you are doing on behalf of the public and what is safe
18 for them, what is good for them, you must take these
19 things into account. Generic isn't good enough. You
20 need to be spending the bulk of your time on the
21 unimaginable.

22 And as smart as we are; because I heard
23 earlier on the pat on the back for we're smarter now
24 than we were 50 or 60 years ago, we're not as smart as
25 we will be 100 years from now, if we still exist.

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1 Actually, I think I'd prefer to be done by global
2 warming, because a nuclear disaster will be so
3 catastrophic and I don't think any of the folks from
4 the nuclear power industry are going to be out there
5 helping us dig out of the rubble for those who survive
6 it. It is just inconceivable, inconceivable that you
7 don't plan on the riskiest. I don't care if it's a -
8 - as long as there's any risk whatsoever, consider
9 that that might be what happens and the fact that you
10 won't be able to control it.

11 So I applaud the courts. I applaud them
12 for making -- having the industry. And if you're
13 truly a responsible industry and if the NRC is truly
14 responsible to the American electorate that it serves,
15 then it behooves you take this time, I've read the
16 potential of seven years to study this. I don't care
17 how long it takes. It could take 10 years. It can
18 take 20. That's a drop in the bucket to the life of
19 these radioisotopes. It deserves it. Do not rush
20 this through. Do not do it generically. Consider
21 places like Illinois where we are relying on you. And
22 I thank you for your time.

23 MR. CAMERON: Okay. Thank you. Thank you
24 very much, Maureen.

25 And I forgot to mention this earlier, is

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1 that we're only taking one comment per person at the
2 meeting. So I apologize to those of you who thought
3 you could speak again. But we're going to go to
4 someone who hasn't spoken, and this is David Blee.
5 And David will tell us about his affiliation.

6 David?

7 MR. BLEE: Well, thank you, Chip. I am
8 David Blee, executive director of the U.S. Nuclear
9 Infrastructure Council. We are focused on the
10 resurgence of nuclear energy here in the U.S. and the
11 involvement of the U.S. supply chain in the
12 renaissance globally.

13 What do we have, another 30 minutes?

14 MR. CAMERON: Well, we're supposed to be
15 over by 5:00, but as I said, we're going to stay until
16 we hear from everybody. But if you are asking if you
17 have 30 minutes, I would have to say no.

18 MR. BLEE: Oh, I will yield myself as much
19 time as I will consume.

20 MR. CAMERON: Okay.

21 MR. BLEE: But anyway, I appreciate you
22 having a light hand on the trigger here. It's
23 actually great to hear the lively dialogue here and I
24 think to really let the public have a chance. I
25 think, you know, notwithstanding the complications of

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1 the sequester, I'm not surprised to see the Waste
2 Confidence Team here. I think they've had a very
3 thorough, professional, open, and transparent approach
4 all the way through.

5 I might remind some of our friends here
6 that actually the industry pays \$0.90 of every dollar
7 in reimbursements to the NRC. Actually only 10
8 percent of the NRC budget is covered by the taxpayers.
9 And to that end it's always perplexing when the NRC is
10 affected by things like sequestration and Government
11 funding shortfalls. But we've encouraged reform in
12 that area and that simply hasn't happened today.

13 With respect to the subject at hand here,
14 we of course will submit some detailed comments in
15 writing. I might add that the views expressed here
16 are the consensus views of the Council, although not
17 necessarily the individual views of every individual
18 member.

19 With respect to waste confidence, the NIC
20 encourages the Nuclear Regulatory Commission to
21 complete the Waste Confidence EIS rulemaking in a
22 timely manner. Nuclear power is an important part of
23 your country's energy infrastructure past, present,
24 and future. Nuclear energy of course provides the
25 majority of the country's emissions-free electricity

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1 24 hours a day, even when the sun isn't shining and
2 the wind isn't blowing.

3 Completing this rulemaking will allow the
4 NRC to resume issuing licenses and license renewals
5 for nuclear power plants and independent spent fuel
6 storage installations and effectively end the
7 moratorium that is currently impacting those
8 procedures.

9 The Council endorses the NRC's fundamental
10 waste confidence conclusion that used fuel can be
11 safely stored at reactor sites or at off-site
12 locations in a time interval between reactor shutdown
13 and ultimate recycling or disposal of the fuel. This
14 conclusion is supported by many decades of safe secure
15 on-site storage of used fuel in spent fuel pools and
16 in dry storage systems, both in the United States and
17 abroad.

18 Nuclear fuel assemblies are robust,
19 corrosion-resistant metal containers designed to
20 maintain their integrity in the high-temperature,
21 high-pressure, high-radiation environment of an
22 operating nuclear reactor core. Conditions
23 experienced by the fuel in storage are far more
24 benign. The decay heat and radiation associated with
25 used fuel decreases with time, and moreover used fuel

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1 requires no active cooling systems for long-term heat
2 removal. Finally, the ability of used fuel to
3 maintain its integrity during storage is supported by
4 extensive experience, data, and analysis.

5 We heard a little bit about the North Anna
6 earthquake. In fact, what that showed is incredible
7 robustness and integrity and excellence in design of
8 the systems that were deployed at North Anna.

9 While long-term storage of used fuel is
10 safe and feasible, it is not an appropriate permanent
11 solution. Ultimately, the United States must dispose
12 of used fuel or its recycling byproducts. Fortunately
13 there is an international scientific consensus that
14 geological disposal of used fuel is feasible and safe.
15 The United States is fortunate to have a variety of
16 sites suitable for underground end placement of used
17 fuel in a manner that will isolate it from the
18 environment while its radioactivity decays away.

19 Countries such as Finland, Sweden, and France
20 are making good progress towards geological disposal.
21 And the United States was on a similar towards used
22 fuel disposition at Yucca Mountain when some non-
23 germane politics really intervened in that process.
24 Fortunately, as a result of the court order from the
25 U.S. Appeals Court, the NRC is back on the job to

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1 begin re-prosecuting that license application. And
2 the Council urges the Department of Energy and the NRC
3 to proceed expeditiously with the safety review of the
4 Yucca Mountain construction authorization application.
5 In particular, completion and issuance of the SERs
6 and, if necessary, or as necessary, a request for
7 additional appropriations.

8 Since 1982 the Government has amassed a
9 nuclear waste fund of \$30 billion for money collected
10 from customers of nuclear electricity. It is time to
11 use that money for its purpose, the review of the
12 Yucca Mountain repository license application, which
13 would certainly address a lot of the concerns raised
14 here today.

15 The country has already spent upwards of
16 \$10 billion in Yucca Mountain and the American people
17 deserve to see the results of the independent
18 objective safety review performed by the NRC. As
19 President Obama himself pointed out at the beginning
20 of his first term of office, regulatory decisions
21 should be based on sound science, not politics.

22 We heard a little bit about the physical
23 limitation on the repository. In fact, Yucca Mountain
24 has a statutory ceiling of 70,000 metric tons, but
25 that is not a physical ceiling. In fact, I think

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1 there's been some work done showing that it could
2 easily accommodate 140,000 metric tons.

3 So in summary, thank you for the
4 opportunity to make these comments on waste
5 confidence. We look forward to engaging in the next
6 round of 11 meetings and to successful fruition to
7 this process. Thank you.

8 MR. CAMERON: Thank you very much, David.

9 Did we get everybody in the room who
10 wanted to speak? Okay. You asked a question. So you
11 could come up and speak. You want to come up here and
12 introduce yourself again to us.

13 MR. NELSON: I said maybe --

14 MR. CAMERON: Pardon me?

15 MR. NELSON: I said maybe on the list. I
16 wanted to wait until I heard what was said.

17 MR. CAMERON: Okay. Well, well, come on
18 up. Welcome.

19 MR. NELSON: My name is Dennis Nelson and
20 I'm with SERV, Support and Education for Radiation
21 Victims. I'm also a Utah downwinder. I grew up in
22 St. George, Utah, which was directly downwind of the
23 Nevada Test Site, and I know firsthand what the
24 consequences are, the health consequences and the
25 financial consequences are, of nuclear radioactive

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1 waste that has been spread over the environment.

2 Now, I've listened to everything today and
3 I think that "confidence" is a word that's been
4 bandied around a lot, but I for one have really no
5 confidence in the ability of our Government to
6 maintain radioactive waste in a safe way. And all the
7 experience that I've had in my long life has shown me
8 that this is actually true. Not only have we not been
9 able to contain nuclear waste from bomb testing, we've
10 not been able to contain the waste from reactors.

11 And no one has even addressed, at least
12 not addressed adequately, as far as I'm concerned, who
13 bears the risk? What's the insurance? Who pays when
14 this happens? And it inevitably will happen, because
15 we've seen it happen. Who pays? Now, the Government
16 doesn't pay. The Government passed a pathetic anemic
17 compensation bill for the downwind victims of the bomb
18 testing. It was \$50,000 for each person. No medical
19 payments.

20 Who pays for the loss of property when the
21 property disappears or is no longer useable? If it's
22 contaminated like it was in Chernobyl, like it is in
23 Fukushima, who pays? Do I have shoulder that burden?
24 This has to be in your environmental impact statement.
25 All risk. The damages have to be in there. And the

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1 Government has no good real record of paying. The
2 token payments that were made for the bomb testing are
3 pathetic. They're minuscule.

4 So if you really want to have confidence,
5 if you want people to have confidence in your
6 rulemaking, in the ability of the NRC to contain,
7 safely contain this radioactive debris -- well, not
8 debris, but could potentially be debris through all of
9 the transport, the storage, whatever -- I don't have
10 that confidence. And I'm sorry, but this is why I
11 can't really believe that nuclear power has a future,
12 because there's too grave a danger. And the monetary
13 consequences of a major disaster are too incredible to
14 even contemplate.

15 So thank you for letting me speak my
16 piece.

17 MR. CAMERON: You're welcome. And could
18 you just tell us the name of the organization you're
19 with? I just want to make sure that people heard
20 that.

21 MR. NELSON: It's called Support and
22 Education for Radiation Victims. And basically it was
23 created by my wife and I and a third person about 10
24 years ago, and it was really just to help people deal
25 with issues of potential contamination. We got people

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1 referred to us by places like NIRS and lately Beyond
2 Nuclear because people would call them and say I think
3 I've been exposed. What happened? Can you tell me
4 what happened? What are my options? Can I apply for
5 compensation? And these are the kinds of things that
6 we deal with. We try to help people free of charge on
7 our own dime know where to go to find out information
8 about what they were potentially exposed to and if
9 there is a compensation package that applies to them.

10 MR. CAMERON: Okay. Thank you. And it's
11 Dennis, Dennis Nelson. Thank you, Dennis.

12 I'm going to ask Keith McConnell, who's
13 the director to close the meeting out for us.

14 Keith?

15 MR. McCONNELL: Okay. Thank you, Chip.
16 And we do appreciate everyone taking the time to
17 participate in the meetings today. We know that it
18 can be a burden.

19 And I would also note that we are sincere
20 when we say that our regulatory process benefits from
21 the public involvement.

22 With that, I would also just remind
23 everybody to pay attention to the NRC Web site and the
24 WC outreach email listing for the status of our
25 meetings that are planned out the rest of this month

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1 and into November. As we get the information, we will
2 pass it out to any interested party.

3 So with that, I thank everybody again and
4 we'll call the meeting closed.

5 (Whereupon, the meeting was adjourned at
6 5:12 p.m.)

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