UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
+W+++
WASTE CONFIDENCE DIRECTORATE
PUBLIC MEETING
+W+++

MONDAY
OCTOBER 28, 2013
+W+++

The public meeting was held at 7 p.m., at the Radisson Hotel and Suites Chelmsford-Lowell, Chelmsford, Massachusetts, Chip Cameron, facilitator, presiding.

NRC STAFF PRESENT:
KEITH MCCONNEL, NRC/WCD
MIRIAM JUCKETT, CNWRA
ANDY IMBODEN, NRC
DAVID CYLKOWSKI, NRC
SCOTT MOORE, NRC
PAUL MICHALAK, NRC
P-R-O-C-E-D-I-N-G

(7:00 p.m.)

FACILITATOR CAMERON: Okay. We're going to get started with tonight's meeting.

And good evening, everyone. My name is Chip Cameron.

PARTICIPANT: Woohoo!

FACILITATOR CAMERON: That doesn't happen very often.

(Laughter.)

FACILITATOR CAMERON: No, right. Welcome to the public meeting tonight. And our topic is going to be the Nuclear Regulatory Commission's draft Environmental Impact Statement and proposed rule on a topic called Waste Confidence.

And we're not going to use many acronyms tonight. But two that we will use are NRC, for Nuclear Regulatory Commission, and EIS, for Environmental Impact Statement.

And it's my pleasure to serve as your facilitator tonight. And I'm going to be assisted by Miriam Juckett who's right here. And Miriam is with the Center for Nuclear Waste Regulatory Analyses in San Antonio, Texas.

And what we'll try to do is to try to
help all of you to have a productive meeting tonight.
And I just wanted to go over some meeting process
issues before we get into the substance of tonight's
meeting so that you'll know what to expect tonight.

And I wanted to talk about the objective
of the meeting, the format for the meeting, and
introduce some of the NRC staff to you.

The objective is very, very simple. The
NRC wants to listen to your comments, your
recommendations on the draft Environmental Impact
Statement and proposed rule on Waste Confidence.

And then the staff will consider those
comments when it's preparing the final Environmental
Impact Statement and the final rule on Waste
Confidence.

You should know that the NRC staff is
also requesting written comments on these subjects.
And the staff will tell you how to submit those
comments and what the submission date is.

But I want to assure you that anything
that you say tonight will carry the same weight as a
written comment. And it may be that you'll hear
information tonight, either from the NRC or from your
fellow audience members, that you'll want to use to
submit a written comment. It's fine to speak tonight
and to also expand those comments by submitting a written comment.

In terms of the format for the meeting, we're going to have some brief NRC presentations for you, then spend a few minutes on clarifying questions, and then we're going to go onto you for comment.

In terms of ground rules, just a few really simple ground rules to try to help us all have a productive meeting tonight.

When I call your name, and this is based on either the pre-sign up for tonight's meeting or on the -- I believe it's the blue cards that people were given tonight, I'll call your name. And if you could just please come up to the podium up here and just introduce yourself and give us your affiliation if that's appropriate, and then we'll listen to your comment.

And I would ask that only one person at a time speak for two important reasons; one is so that we could give our full attention to whomever has the floor at the time.

And, Gary, I'll be right to you in one second.

Give our full attention to whomever has
the floor at the moment. And also so that we could
get what I call a clean transcript. We are taking a
transcript of the meeting tonight. And Pete Holland
over here is our stenographer. And with one person
speaking at a time Pete will know who is talking.

And that transcript is going to be available to all of you. It's going to be your
record of the meeting and it's going to be NRC's record of the meeting.

I'm going to ask you to be brief with your comments because we have a whole lot of people
who want to talk tonight. So I'm going to ask you to follow a three-minute guideline so that we can hear
from everybody tonight before we adjourn.

And I apologize in advance if I have to ask you to sum up your comments because I know that you put a lot of work into this. And if you don't get to say everything you want to say tonight, please send us a written comment.

And I should point out that we do have these forms on the seats and they're out at the table. And they're called NRC Public Meeting Feedback Forms to give us your opinion of how the meeting was handled so that we can try to avoid any mistakes or so that we can repeat any good parts.
You can also put comments right on this sheet. And it's already what's called franked, okay. You don't need to put postage on it. You can mail it to the NRC or you can leave with -- leave it with us tonight.

One thing I do want to emphasize is that the NRC staff is going to be listening to your comments. They're not going to be responding to your comments tonight or any questions that you pose from the podium. But they will carefully consider those comments and questions and they will address them in the final Environmental Impact Statement.

We want to make sure that you know what the process for the EIS, finalizing the EIS is, what the format is for tonight. So, we will have about ten minutes for questions after you hear the NRC presentations on format, process, the organization, and structure of the EIS.

We won't be able to answer any questions on technical subjects in the meeting tonight. But, out in the foyer we have some NRC experts. They're going to be out there for the whole meeting.

If you do have a technical question, just please go out and see them. But if you want that to be on the record of the transcript, then
you'll have to put that question or subject in your formal comment so that will be on the transcript. Because nothing that's discussed out there will be on the transcript tonight.

Let me quickly go to Gary for a question. Do you have a question about the format?

MR. SACHS: Sure. I see some fine people standing up there with a sign. Often when the NRC comes to Brattleboro they don't let people stand behind them.

So I'm just wondering is the NRC changing its ways? Are you letting people stand behind you now?

Usually the people in Brattleboro range in age from 65 to 94. These people look awfully scary back there.

FACILITATOR CAMERON: Well, I don't think they are trying to be scary. And I don't think -- I don't know if there's anything about Brattleboro. I'm just teasing about that, Gary.

But what we're trying to do is -- the NRC does not want to -- it wants to limit the use of signs if it interferes with the meeting, like blocking someone's view or if there's a sign on a stick, okay, that might harm someone, or even a
poster that has sharp edges.

    I can't speak for -- I don't think there's necessarily a consistent NRC policy on that. But I know that the Waste Confidence staff wants to make sure that if there is an expression, free speech, and it's not interfering, these people are -- may be scary but they're not --

    (Laughter.)

    FACILITATOR CAMERON: I'm sorry. They're not standing in front of the slides, so that's fine.

    But thank you for pointing that out, Gary.

    Now, what I'd like to do is thank all of you for being here and to introduce the NRC staff who are here, some of the NRC staff. Because the NRC has brought a lot of people to make sure that they can answer the questions that you have on that.

    First of all, I'd like to introduce Keith McConnell. And Keith is the director of the Waste Confidence Directorate at the NRC and he's going to be speaking in a few minutes.

    Next we have Andy Imboden. And Andy's the chief of the Communications and Rulemaking Branch in the Waste Confidence Directorate and he also will be talking.
We have a representative from the NRC office of general counsel who's here. This is David Cylkowski.

And we also have as our senior manager here I think is Scott Moore who is the deputy director of the Office of Nuclear Material Safety and Safeguards.

And out in the foyer is Paul -- well, he's in the back of the room, Paul Michalak. Now, Paul is the branch chief of the Environmental Impact Statement Branch in the Waste Confidence Directorate. And Paul has some of his staff here, experts, who have authored many of the chapters in the Environmental Impact Statement.

So, again, if you want to talk to them they're back there. They'll go out into the foyer.

I'd also like to thank Susan Wittick from the Waste Confidence Directorate and TR Rowe who make all of the logistics possible for these particular public meetings.

And I think with that, Keith, are you ready to talk to us? This is Keith McConnell.

MS. NESTEL: Oh, are -- how about letting us introduce ourselves? The public is here. I'm Hattie Nestel and I work on Vermont Yankee shutting
down --

FACILITATOR CAMERON: Okay.

MS. NESTEL: This is David Agnew and he works on shutting down Pilgrim.

FACILITATOR CAMERON: Okay. Hattie and David --

MS. NESTEL: Does anybody else want to introduce yourselves?

FACILITATOR CAMERON: Hattie and David, we're not going to do introductions of the public now. We're going to be hearing from a lot of you and you will be introducing yourself then, okay.

MR. SACHS: Will the NRC be helping over at Fukushima beginning on the 8th of November?

FACILITATOR CAMERON: That's a process question that we'll --

MR. SACHS: I thought it was a waste issue --

FACILITATOR CAMERON: -- get to when we -- after we go to the -- Gary, I'm going to have to ask you to just hold it until we get to the question period, please.

We're going to go to Keith McConnell now and then Andy Imboden. And then we'll go on to answer questions that are on process.
MR. SACHS: Do you know the answer to that?

FACILITATOR CAMERON: Go ahead, Keith.

DIRECTOR MCCONNELL: We'll address your question during the question and answer period if that's acceptable.

MR. SACHS: You don't know if there's NRC people helping remove the waste from Number 4's --

FACILITATOR CAMERON: Gary, Gary --

MR. SACHS: You give us a chance --

FACILITATOR CAMERON: And, Gary, please, let's just let the people talk and then we'll see if we can answer that question for you.

Go ahead, Keith.

DIRECTOR MCCONNELL: Okay. Thanks, Chip.

As Chip indicated, I'm Keith McConnell and I'm the director of the Waste Confidence Directorate at the NRC. And I, too, would like to welcome you here tonight to this public meeting on the Waste Confidence proposed rule.

I do have a couple of announcements at the outset that might be of interest to you all with respect to our public meeting schedule. As you may or may not know, with the government shutdown we had
to postpone five of our public meetings that were scheduled in other regions of the country.

   Since we've been back to work now for about a week and a half we've rescheduled those public meetings. And the list of the times, the dates, and the venues is out on the table for anybody who's interested.

   The second announcement I'd like to make is that we have extended the public comment period for comments on the draft proposed rule and draft Generic Environmental Impact Statement.

   It's been extended from November 27th of this year to December 20th. The reason that was extended was to allow us to reschedule those public meetings and have them within the public comment period.

   The third -- third and final announcement I'd make is that we've also scheduled a thirteenth interaction with the public. It will be on December 9th and it'll be a facilitated teleconference. It would be the last interaction that we have planned and it would be the last opportunity to provide -- for the public to provide comment on the draft Generic Environmental Impact Statement and proposed rule.
The purpose of today's meeting is to solicit your comments on this draft Generic Environmental Impact Statement and proposed rule regarding the storage of spent nuclear fuel beyond the operating life of a power reactor and it's before -- and before it's disposed of in a geologic repository.

These two documents, the draft Generic Environmental Impact Statement and proposed rule, are the culmination of the NRC activities over the past year to address the U.S. Court of Appeals from the District of Columbia's decision to vacate the 2010 version of the Waste Confidence rule and remand it back to the NRC staff to fix certain deficiencies that The Court had identified.

Given that the purpose of tonight's meeting is to solicit comments from you, we, the NRC staff, intend to limit what we present at the outset of the meeting so that everybody has an opportunity to provide their comments and put them on the record.

I would note, however, as Chip's mentioned, that the technical staff who are responsible for writing the vast majority of the draft Generic Environmental Impact Statement are here tonight and they're out and available in the foyer,
although most of them are back in the back of the room right now. But, they are out there to answer any questions that you might have on those two documents so I'd offer that you take advantage of that opportunity.

I'd also like to talk briefly about our rulemaking process. Rulemaking is a very important part of what we do at the NRC. It's the vehicle that we use to implement national policy and standards and it's also the mechanism we use to ensure that public health and safety is protected and that the environment is protected.

The meeting tonight is just one of the very important parts of that rulemaking process and so we do encourage you to participate. And we encourage everyone to participate in the form that they want to participate in.

I'd also note that this meeting is just but one of several ways we've attempted to make the Waste Confidence rulemaking effort as open and as transparent as possible.

We thank those of you that have participated in the past in the public scoping meetings we had back in October and November of last year. And we also thank those of you who have
participated in the monthly public status calls that we've had going on since January.

And I would note that we have one additional monthly status call that will take place on Wednesday of this week at 1:30. And that meeting, or that call, will discuss in more detail the rescheduling of the public meetings and the extension of the public comment period.

We do want your perspectives and your input. In that regard, there are some specific questions that the NRC Commissioners have asked, in the announcement for the proposed rule, for the public to comment on specifically. We would hope you would take the opportunity to comment on those particular aspects.

By providing comments on those specific issues as well as any general comments you might have, it will help us improve the final documents and it will be very important information for the Commission to have as it deliberates the final documents that we would provide them.

So with that, again, I welcome you all to tonight's meeting. And I'll turn it over to Andy Imboden and he'll provide a brief background presentation on what's in the draft GEIS and proposed
rule. Chip.

FACILITATOR CAMERON: Okay. Thank you, Andy. And, Miriam, when we go for questions we'll go to Gary.

MR. IMBODEN: Thank you and good evening. My name is Andy Imboden. I'm the chief of the Communications Planning and Rulemaking Branch for the Waste Confidence Directorate. And I'd like to add to Keith's welcome and thank you all for participating today.

At tonight's meeting I'll give a brief history of Waste Confidence, outline key aspects of the draft Generic Environmental Impact Statement and the proposed rule, and explain how you can comment on the documents. Then we'll get to the public comment portion, which is the heart of the meeting.

Waste Confidence accomplishes two things; it generically addresses the environmental impacts of continued storage and makes the determination about the feasibility of safe storage and the timeframe for repository availability.

The draft Generic Environmental Impact Statement for Waste Confidence satisfies just a part of the Commission's National Environmental Policy Act obligations for reactor licensing and relicensing and
the licensing and relicensing of spent fuel storage facilities.

The draft Environmental Impact Statement also serves as the regulatory basis to support changing the Waste Confidence rule.

The Environmental Impact Statement and proposed rule only cover the timeframe after the license life for operation of a reactor; however, it's important to note that the proposed rule on Waste Confidence does not license any particular site or facility nor does it allow long-term storage of spent nuclear fuel at any site.

The NRC's history with Waste Confidence began in 1984 when the Commission issued the rule. Since then, the rule has been updated most recently in 2010.

In 2012, the rule was challenged and the Court of Appeals for the D.C. Circuit vacated the 2010 rulemaking. The Court identified three deficiencies with the Commission's environmental analysis that supported the 2010 Waste Confidence rule.

The Court found that the analysis didn't evaluate the environmental effects of failing to secure permanent disposal of the spent nuclear fuel.
The Court also directed the Commission to provide a forward-looking assessment of spent fuel pool leaks and spent fuel pool fires.

The Court stated that a generic approach either with an environmental assessment or an Environmental Impact Statement would appropriately address the issues associated with Waste Confidence.

Following The Court's decision, the Commission directed the staff to prepare an Environmental Impact Statement evaluating these issues with the possibility of issuing an updated Waste Confidence rule.

There are two things I'd like for you to remember. The first is that Waste Confidence is just a small part of the overall environmental analysis for reactor or storage facility licensing or relicensing.

Secondly, the Waste Confidence rule does not license any facility or authorize storage after the expiration of a facility's license.

The draft statement describes the impacts of continuing to store spent nuclear fuel beyond the licensed life for reactor operations whether in spent fuel pools or at independent spent fuel storage installations located at both reactor
and away from reactor sites.

The draft statement describes why we're revisiting Waste Confidence. It discusses the alternatives considered, it describes how environmental impacts were evaluated, it describes what facilities are covered and the environmental impacts of continued storage at reactor sites and away from reactor sites.

It also contains information on the costs of the alternatives to the rulemaking. It describes the cumulative environmental impacts of continued storage, and it contains information on the feasibility of a repository and the feasibility of safe storage of this spent fuel.

The draft statement assesses impacts of continued storage of spent fuel for three timeframes based on when a repository would become available.

The first timeframe is the short-term timeframe which would be 60 years after licensed life for operations. The long-term timeframe is 100 years beyond that for a total of 160 years. The indefinite storage scenario was that no repository would become available.

MR. SACHS: Can you be clear again on what the three deficiencies were that were found?
MR. IMBODEN: Yeah. I --

FACILITATOR CAMERON: We're going to let him finish his talk and then we're going to go out to --

MR. SACHS: It's a clarifying question --

FACILITATOR CAMERON: -- questions.

MR. SACHS: -- to finish the rest of what he said --

FACILITATOR CAMERON: But we want to let them finish their presentations so that you can hear the whole thing. And he's almost done.

MR. SACHS: Well, it needs to be expressed in a very clear way. The three deficiencies are this, this, and this. How are those three deficiencies being addressed?

FACILITATOR CAMERON: We'll get to that question. Thank you, Gary.

Go ahead.

MR. IMBODEN: The draft statement serves as the regulatory basis for the proposed rule. The proposed rule would generically address the environmental impacts of continued storage. These impacts would not be revisited in future site-specific licensing proceedings unless the NRC discovers something about the site that would make
the application of the conclusions in the
Environmental Impact Statement inappropriate.

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

This proposed rule states that the
analysis supports the Commission's determinations
that it is feasible to safely store spent nuclear
fuel following licensed life for operation of a
reactor.

It also states that it's feasible to
have a mined geologic repository within 60 years
following the licensed life for operation of a
reactor.

And we are specifically seeking comment
on whether those final -- the final rule should
contain these two statements.

There are several ways to comment. To
ensure that your comments are considered they must be
received by December 20th, 2013. Mailed comments
must be postmarked by December 20th, 2013.

All comments, whether submitted in
writing or provided orally, are considered equally.
Some have already commented and others will comment
later and we're here tonight so that you can tell us your comments on the Generic Environmental Impact Statement and proposed rule.

Tonight's comments are being transcribed and will be considered part of the record. You could also leave written comments with the NRC staff located at the registration desk outside the door and we will make sure that those comments are added to the docket. And you may also e-mail, fax, or mail your comments to the NRC.

You may also provide comments using the Federal Rulemaking website, www.regulations.gov.

That concludes the NRC's presentation and I thank you for your attention.

Chip?

FACILITATOR CAMERON: Okay. Thank you. We're going to go to, Miriam, we're going to go to Gary and let's get him on the record for two questions that he had; one about Fukushima and one about the three deficiencies. And then we'll see if anybody else has questions.

MR. SACHS: I don't know what you're referring to, but I can speak to-- didn't the NRC recently -- didn't -- it doesn't make a difference. Gary Sachs, Brattleboro, Vermont.
Didn't the NRC recently say that they are not to be held accountable to the U.S. Federal Courts?

And so I'm wondering how it is that the NRC wants to be outside the court system, that's what I understand. So I'd like it if somebody could speak to that.

And I'm wondering how it is that the court system in the, I believe it was the D.C. Circuit Court, found those three deficiencies.

I'm not so sure I'm seeing the NRC being quite as transparent if I hear the NRC saying that they don't -- they're not to be held accountable in the Federal Court system.

FACILITATOR CAMERON: Okay.

MR. SACHS: So I'm trying to get some clarity on that.

FACILITATOR CAMERON: Okay. Thank you.

MR. SACHS: Because that, to me, is relative to the GEIS issue.

FACILITATOR CAMERON: And, Pete, this is Gary Sachs who's making that comment, S-a-c-h-s.

I think the questions are about the court case. And perhaps we can just give a summary of what the findings of The Court were in regard to
that.

Andy?

MR. IMBODEN: Yes, this is Andy Imboden with the NRC.

The Court found three deficiencies with the 2010 rule, which is why the rule was vacated and which is why -- one reason why we're here today.

And the three deficiencies were that The Court found that the NRC's analysis did not evaluate the environmental effects of failing to secure permanent disposal of the spent nuclear fuel.

MR. SACHS: And you guys have solved that?

MR. IMBODEN: Our -- the question was did we solve that. That's one of the things that we'd like to get your comment on today. One of the timeframes we're working with is the indefinite scenario. And so that would be the case where a repository is never available.

The other two deficiencies that The Court found was that the NRC did not provide a forward-looking assessment of spent fuel pool leaks and spent fuel pool fires.

MR. SACHS: That's what happened.

MR. IMBODEN: And the -- you know, those
you could find in the draft Generic Environmental Impact Statement and the proposed rule. And we'd like your comments on our analysis on those subjects, absolutely. Thank you.

MR. SACHS: Number three? I forgot number --

FACILITATOR CAMERON: Okay. Do you have one more?

MR. IMBODEN: There are no repositories.

MR. SACHS: No repository, I got number two.

MR. IMBODEN: Right. Spent fuel pool leaks.

MR. SACHS: Got it.

MR. IMBODEN: Spent fuel pool fires.

MR. SACHS: Thank you.

FACILITATOR CAMERON: Okay. Thank you, Gary.

Are there other --

MR. SACHS: But that doesn't address the other part of my question. The other part of my question has to do with after that. The NRC came forward saying that they don't believe the Federal Courts have a right to rule on what the NRC decides.

That was this year, 2013. I'd like
someone to respond to that in regard to --

FACILITATOR CAMERON: Gary, Gary, we'll put that on as a comment on the record. Because I'm not sure that people are certain --

MR. SACHS: That's my understanding.

FACILITATOR CAMERON: -- what you're talking about. And I'll tell you what, we'll put that on as a comment on the record. And we have our lead attorney here on Waste Confidence --

MR. SACHS: Sure.

FACILITATOR CAMERON: -- Tison back there, and you can talk to him about that. Thank you. Thank you very much.

Anybody else have a question on structure, process?

Yes, sir. And please introduce yourself.

MR. STAMM: My name is Steven Stamm and I'll introduce myself further when I ask other questions.

But you had made the statement that the NRC has asked specific questions that you'd like feedback on. And I just wanted to get the clarification as to where specifically in the documents that I can find those questions.
FACILITATOR CAMERON: Good. Great, great question. And I believe these are in the Federal Register Notice. And Andy's going to find the exact cites.

Do we have the Federal Register Notice out there?

PARTICIPANT: Yeah, we do.

FACILITATOR CAMERON: Okay. Good.

PARTICIPANT: Section 4.

FACILITATOR CAMERON: Okay. Do you want to just tell this gentleman?

MR. IMBODEN: For the record and for everybody, we have copies of the rule, the proposed rule, the Federal Register Notice out in the foyer. It's Section 4 of the document and the citation of that page is Volume 78 of the Federal Register, page 56799.

And, you know, I think you can see that's the kind of questions that the Commission is specifically soliciting your input on. Thank you.

All those documents are available from our Waste Confidence website.

FACILITATOR CAMERON: Okay. Other questions on organization?

Yes, sir.
MR. TILBURY: Very simply, how can you -

FACILITATOR CAMERON: If you can introduce yourself to us, please.

MR. TILBURY: Very simply, how can you come up with all these statements and then listen to the comments?

I would think that you would listen to the comments and then come up with the statements. That's my simple question.

FACILITATOR CAMERON: Okay. Perhaps, Andy, could you just explain about the process for putting together a final EIS that starts with scoping and what we're doing with the draft?

MR. IMBODEN: Yes. This is Andy Imboden with the NRC.

What we're doing is we're following the well-established rulemaking and Environmental Impact Statement process.

The NRC, back in October of last year, solicited comments from the public on the scope of what we should consider and what we shouldn't consider of this review.

We took a look at that. We have quite a lot of public input on that. We had four public
meetings and got several hundred comments. Put out a scoping report which summarized everything, we put that out in March.

The NRC took that, along with the other documents that have compiled the long, rich history that the NRC's had with Waste Confidence since 1984, and put together this draft Generic Environmental Impact Statement and the proposed rule.

They're proposed, they're draft. We're looking for public comment on these documents. We're looking, so that way you could tell us what you think about them and if we should miss something or if we should consider something else.

We're going to take all that at the end of the comment period; so we have now a 98-day comment period so that should be -

MR. TILBURY: If you had called it a draft, I -

MR. IMBODEN: Yeah. It is a draft. Yeah. The draft Environmental Impact Statement. And the other term that's used is proposed rule. You could think of that as a draft rule. That's just the term of art for that.

And then we're going to take that back and the Commission and the staff, when we put the
final rule and final Environmental Impact Statement out, the public comments will have been considered and responded to.

FACILITATOR CAMERON: Okay. Thank you very much. Let's take one more question and then we're going to start with comments.

Yes, ma'am.

MS. SHAW: Thank you. Sally Shaw. I'm from Gill, Massachusetts, in the evacuation zone of Vermont Yankee Nuclear Plant.

I have a question about the process of what happens to the NEPA EIS that you're working on here, the GEIS. Who reviews it?

I know traditionally the EPA reviews NEPA documents; however, when I looked at the EPA's regulatory guidance on nuclear plants it said that they review Environmental Impact Statements regarding reactor licenses, new reactors, license renewals, that sort of thing, but they do not look at spent fuel pool issues because that's covered under the Waste Confidence rule.

So we have a little tautology here and I'd like to know how we're going to get out of it.

FACILITATOR CAMERON: Okay. Good question. And, Andy, do you want to answer Sally's
question, please?

MR. IMBODEN: Yeah, hi. Andy Imboden from the NRC.

That's an excellent observation. That guidance was written before The Court vacated the rule. So the EPA will be revising the -- or not revising. Pardon me.

The EPA will be reviewing and providing us comments on our draft Generic Environmental Impact Statement.

MS. SHAW: Do they have the authority to say, sorry, you didn't do it, you need to start over?

MR. IMBODEN: The EPA has all the authority they have on this Environmental Impact Statement as they do with any Environmental Impact Statement.

MS. SHAW: Could you answer my question, though, have they ever sent one back and said sorry, this doesn't cut?

MR. IMBODEN: The question was did the EPA ever send one back? Not any one that I've worked on. I'm not familiar with anything else. Sorry.

FACILITATOR CAMERON: And I guess a logical follow up, are the EPA comments, are they public? Can people look at those comments at some
point in the process?

MR. IMBODEN: Oh, yeah. Yeah. We'll most likely put that in, I think, Appendix C of the Environmental Impact Statement of the final will have all kinds of the correspondence we have with other federal agencies.

MS. SHAW: The final?

MR. IMBODEN: In the final.

FACILITATOR CAMERON: Okay. Thank you. Thank you for that question, Sally.

We're going to start the comment process. Thank you all for those questions.

And I was going to ask, Councilman Giunta, do you want to come up and address us first and then we're going to go to Jim Lampert and Mary Lampert. This is Councilman Giunta from the City of Franklin, New Hampshire.

Yes, please. Thank you.

COUNCILMAN GIUNTA: Good evening, everyone. And I wanted to say I don't know where you've heard my name before, but it's very unusual for someone to get my name the very first time around. So you're good at what you do.

FACILITATOR CAMERON: Thank you.

COUNCILMAN GIUNTA: My name is Tony
Giunta. I am a city councilor from the City of Franklin, New Hampshire.

For those of you who do not know where the City of Franklin is located, we are in central New Hampshire. We are just above Concord and we're almost directly in the middle of the state.

For the record, I don't have specific comments for the number of questions that were asked out of the Federal Register. What I am going to tell you is I am here tonight in support of what currently exists in the proposed rule. So hopefully that's enough, that I don't need to go and pick apart with all the comments. I am in favor of that.

Now, you might ask why. Why am I in favor of it? The City of Concord has 8,500 citizens of which I proudly represent. Prior to becoming city councilor, I was also mayor of that city from 2000 to 2002 and reelected 2002 to 2004.

We had at the very tail end of my mayorship in that city our most major employer in the city, our biggest employer in the city, they had made the decision that they were going to move out of our city.

Franklin is a proud former mill town. And, as you know, the mills made that decision back
in the 60s and 70s and moved off-shore.

Industry, light industry and medium manufacturing came into the City of Franklin. They started making that decision in 2005. It was devastating for our city, major employer.

The reasons they were moving out of our city were many. Like everybody else, reducing costs, going to China.

I'm here tonight, not to focus on that negative story, but to tell you that things have turned around. That decision has turned 180 and now they are coming back. They are returning with 200 jobs to our city and they are also coming and investing in our city. They've invested into an $11 million foundry which is one of the leading foundry's in the world when it comes to manufacturing their particular product.

That $11 million is going towards our tax base and it's very important for our city government as well as for the citizens.

The decisions to come back were based on several. One being the quality of the product that they were producing overseas was not up to the quality that they can get here in the United States. So, they were throwing away a lot of product overseas
and they could do much better here and be much more competitive with the work that was being supplied by the workers from the City of Franklin.

The other reason was energy costs are stable and if not coming down. They have access to natural gas. The one thing I can tell you that probably was not on the top of their mind when they decided to come back was “does New England have a viable, sustainable energy electricity grid?” That was assumed that was the case in the City of Franklin.

I'm here tonight to tell you as a city councilor that the reliability of the New England electrical grid must be maintained. And it is up to NRC to oversee that one of the major factors in maintaining a reliable electric grid is nuclear power.

PARTICIPANT: False.

COUNCILMAN GIUNTA: I was at a meeting in Plymouth and I didn't see a lot of people here in favor of Hydro-Quebec, which is the largest hydro project to come down from Canada. That would have been an excellent source, but people are opposing it.

Like it or not, part of the mix of a reliable system of electricity in New England is
nuclear power.

PARTICIPANT: Not according to --

PARTICIPANT: That's not true.

COUNCILMAN GIUNTA: It may not be according to anybody. I am telling you --

FACILITATOR CAMERON: Okay. Let's not have a debate with the speaker, please. Just please continue, Councilman.

COUNCILMAN GIUNTA: Understood. Thank you.

MR. SACHS: Why aren't we invited up to the podium?

FACILITATOR CAMERON: Okay. Go ahead, Councilman. You have the right to give your comment, okay.

MR. SACHS: I'm happy to hear your opinion, Councilman.

COUNCILMAN GIUNTA: If we do not ensure --

MR. SACHS: We all have --

COUNCILMAN GIUNTA: -- a reliable electrical grid, we will reverse this trend that we are seeing --

MR. SACHS: If we're lucky.

COUNCILMAN GIUNTA: -- of industry
returning back to New England. And I look to the NRC to make sure that our grid is reliable for the future. So to end, I support the adoption of the Waste Confidence rule and the draft Environmental Statement.

MR. SACHS: You're repeating yourself.

COUNCILMAN GIUNTA: As adopted it will ensure the continued availability of sustainable, reliable, affordable nuclear power to the New Englander grid.

And let me say this, all the meetings I've been to there has always been opposition to those in favor.

FACILITATOR CAMERON: Okay. Thank you. Thank you very much, Councilman.

COUNCILMAN GIUNTA: Thank you for your time.

FACILITATOR CAMERON: Yeah. You're going to hear things tonight that you may not agree with, you may not think are expressed correctly on both sides of the issue and I'm just going to have to ask you to be polite and don't interrupt people. Just have the courtesy to let them give their comment. Thank you.

Jim Lampert?
MR. LAMPERT: I'm Jim Lampert. I'm from Duxbury, Massachusetts. I'm not from Plymouth, but on the other hand I look out my bedroom window and I do see the Pilgrim Power Plant.

Just a little two vignettes of background. First, I am an MIT graduate and, heaven-forbid, also a lawyer. And, second, my familiarity with nuclear power probably goes as far back as anybody's in this room to about 1954 when my father was designing the first land-based nuclear electric power plant to go online in this country.

I'm a little disappointed in this particular rule in a number of aspects. First, let's start off with the idea that it's generic.

Having spent a little time in a dictionary today, generic, to most people, means that something applies equally to all members of the class.

I would strongly doubt that anybody in this room in their heart of hearts believes that everything that's said in this draft GEIS or in the NUREG applies equally across the board to every nuclear power plant.

Can you say it applies equally to every PWR and every BWR?
Can you say it applies equally to a plant that is operating perhaps efficiently and certainly making money?

And, also, to a plant like Pilgrim that is losing approximately $30 million every year? That has had ten times as many shutdowns this year as the national average? That has had close to 20 unusual, quote, "events," closed quote?

I doubt that every plant generically in this country is having this type of trouble. Because, frankly, if you stand back and look at it, what conclusion can you draw? That they don't have enough money to do the preventative maintenance that needs to be done to continue to operate in a way that any rational person would consider safe.

At a conference at the Mass State House a couple of weeks ago -- Arnie Gundersen -- when you hear a plant is safe what should you assume? "You should assume," -- and this is quoting Arnie -- "it is meeting the minimal requirements of a compliant agency."

If you read the report itself, there are more other words other than generic that give me some problems. Let's look at spent fuel storage.

I looked in vain because people kept
saying, "Oh, the NRC has said they're all equally safe, all methods."

Well, unless somebody at the NRC can point me to where that is, all I found in the NUREG was that both provide, quote, "adequate protection."

What's adequate mean? One definition is barely sufficient. A second is mediocre.

You also look at the word, "Oh, we provide reasonable protection."

Let's look at reasonable. Plausible, and unfortunately what is probably the most accurate here, inexpensive.

Plants -- in looking at the problems of safety with various types of storage, the NRC takes consequences on the one hand and it multiples them by probability on the other.

And if you look at the probability you see numbers like 10 to the minus 7, 10 to the minus 8, 10 to the minus 15, which basically guarantees that no matter how large the potential consequences are -- and a study done for the Mass attorney general said the potential consequences of a spent fuel fire at Pilgrim is $488 billion. And this was in dollars a few years ago. And 24,000 latent cancers.

Does anyone believe that that is
generic?

FACILITATOR CAMERON: Could I just ask you to wrap up, please?

MR. LAMPERT: Yeah.

FACILITATOR CAMERON: Thank you. Thank you very much.

MR. LAMPERT: We support -- we do not support the GEIS that is one of the two major supporting documents on which the NRC relies, frankly because it is not site-specific, and that the rationale for it is that they want to achieve efficiency.

I would suggest that the proper rationale is let's achieve the public health and safety in a way that is reasonable and beyond inexpensive.

FACILITATOR CAMERON: Thank you. Thank you very much, Jim.

And next we're going to hear from Mary Lampert.

MS. LAMPERT: Unfortunately, our sons are overseas. Mary Lampert, director of Pilgrim Watch located in Duxbury, Massachusetts, focused on Pilgrim.

First, I would advise that we stop the
train on this whole issue. The reason being first the national -- the Congress charged the National Academy of Sciences to determine the adequacy of NRC regulations. And it asked specifically an emphasis on waste storage. Until that document is completed, it is premature to carry on with this business you're doing.

Furthermore, it's premature because the probabilistic risk assessment, which is a foundation of assessing the impact of the various areas you looked at, are currently based on pre-Fukushima assumptions and probabilities; and, therefore, it's inappropriate to use a PRA of yesterday to make any judgment in this area until it has been updated.

I would direct you in this to Chairman Macfarlane's notation note on the SECY dealing with filtration where she goes into the problems with PRA that she's identified.

Pilgrim Watch supports the no-action alternative obviously and for two principal reasons. First, as my husband talked about, it should be site-specific, not generic.

The other reason is the foundation of the GEIS of the final document rests on the draft GEIS and the -- what I call the earthquake study that
looks into pool fires.

My husband talked about the GEIS and I will have written comments. The problems with the earthquake study are multiple. I would refer you to the analysis by Dr. Gordon Thompson submitted by Diane Curran.

The highlights of what's wrong are as follows: The study did not consider geometry. It didn't look at or compare high-density to low-density storage, which is very important element.

It's limited in its consideration of water loss. Looks at complete water loss. And in actuality, NUREG-1738 that was put out in 2000, finally, and I see admitted the total drainage was the most -- was not the most severe, rather partial drainage. But the study doesn't look at partial drainage.

It's limited in consideration of initiating events. It doesn't consider an attack, only earthquake. It makes no linkages amongst reactor accident and pool accident. There's no analysis of cask drops. Misleading statements about mitigating actions.

It simply says that adding water or reshuffling how the assemblies are in the pool. But
it gives no data how many reactors have water-spray systems. How did they test whether adding water at a certain point to a burning assembly would exacerbate fire, not correct it?

As far as duration goes, it only considers up to seven days of a boil fire accident. Has nobody figured Fukushima?

Also it uses MELCOR. And there's been no demonstration that MELCOR has -- is able to look at heat transfer and other important elements to do a real empirical study, not start with a conclusion and pretend to have a study.

Last, the study --

FACILITATOR CAMERON: Mary, can I just ask you to sum up for us --

MS. LAMPERT: Sure.

FACILITATOR CAMERON: -- please?

MS. LAMPERT: The study assumes there is no risk to cask, but it doesn't show that. What we need is a comparison of casks storage under various conditions to spent fuel pool various conditions, and then you might come out with something.

That's what we expect. We don't expect no science to masquerade as science. We support expedited transfer of a spent fuel and hardened
dispersed dry cask storage. Thank you.

FACILITATOR CAMERON: Thank you. Thank you, Mary.

Our next three speakers are Stratton Kirton, Doug Bogen, and Nancy Wrenn. And this is Stratton Kirton.

MR. KIRTON: Hi. Good evening. As you heard, my name is Stratton Kirton. I'm here on behalf of the CASEnergy Coalition. It's a national grassroots organization that advocates for the use of nuclear power as a carbon-free source of energy.

I'm here tonight to give remarks on behalf of the coalition and on behalf of myself.

I would like to start by thinking -- thanking the Commission and thanking everybody who showed up here tonight. I think it's important that all of our voices are heard no matter what side of this issue we're on.

So I'm here to express my support and confidence in the storage of spent fuel on-site at nuclear facilities. The industry has shown that over the course of decades it is committed to responsible, safe, and secure storage techniques on-site.

Now, we all know that on-site storage was never intended as a permanent solution. And we
also know that industry's gone to great lengths to make on-site storage as safe and secure as possible.

PARTICIPANT: No way.

MR. KIRTON: These facilities meet the standards and rigorous requirements that are set by the NRC. And the industry's invested billions of dollars and hundreds of thousands of man-hours, post 9/11 alone, in securing and reinforcing these facilities.

Now, I would also like to talk about an issue that's near and dear to my heart more so than specifically on the Environmental Impact Statement or the draft rule, and that's climate change.

MR. SACHS: Are you a volunteer?

MR. KIRTON: I'm sorry, I'm here to give a statement.

So I grew up in a small --

MR. SACHS: You said grassroots, does that mean volunteer?

MR. KIRTON: I grew up in a small fishing village on the Gulf of Mexico. Now, my home town was hit with a 19-foot tidal surge seven years ago. A tidal surge that had never been recorded in that level in the entire history of this little town which was originally settled by the Spanish hundreds
of years ago. So as long as they've been keeping records, nothing like this had ever occurred.

Now, our nation gets 19 percent of its electricity from nuclear power. But when you look at what percentage does it get from its clean-air electricity, that number jumps up to over 60 percent. Almost two-thirds of our clean-air electricity comes from nuclear.

Now, looking at everything that we know to be true in terms of climate change, looking at what the IDCC summary report that was recently released said in the upcoming meetings in Poland, climate change is a serious issue.

And I -

PARTICIPANT: What's IDCC?
MR. KIRTON: I'm sorry, what's that?
PARTICIPANT: What is IDCC?
MR. KIRTON: Sorry, the Intergovernmental Panel on Climate Change.

So I personally see climate change as the largest threat that my generation faces. And I do not understand from my personal perspective why we would try to shut down our largest source of clean-air energy and carbon-free energy.

So --
MS. SHAW: This is about Waste Confidence.

FACILITATOR CAMERON: Excuse me, could you just not make comments and just let them speak, you know.

MS. SHAW: I'm sorry, I have Tourette's.

MR. SACHS: Well, the rest of us want to speak about the Waste Confidence.

FACILITATOR CAMERON: Okay. I'm sorry. I'm sorry, Sally.

MR. SACHS: He's not speaking about that.

FACILITATOR CAMERON: Look, there's a whole lot of range of subjects covered under Waste Confidence, okay. So the NRC staff is going sort out what's relevant and not relevant. So just please let the people finish their statement.

Stratton, do you want to go ahead?

MR. KIRTON: Yes. And finishing my statement I would just like to say as the Commission considers this issue and future issues, I would just encourage them to think about all we can do to strengthen our nation's commitment to all clean-air technologies, including nuclear.

Thank you for your time.

FACILITATOR CAMERON: Okay. Thank you, Stratton.
And, Doug, Doug Bogen and Nancy Wrenn.
And then we're going to go to Leslie Sullivan Sachs
and to Gary Sachs.

MR. BOGEN: Good evening. My name is
Doug Bogen. I'm executive director of Seacoast Anti-
Pollution League based in Portsmouth, New Hampshire.
And my organization has been around for 44 years. We
started back in 1969. I think we probably predate
the NRC, at least in its current form.

And I mention that not just because
we're all getting old fighting this issue, but we've
been raising these issues of what to do with the
waste all that time for four decades now and still no
solution. This is really a bizarre situation. It
feels like we're watching endless reruns of a bad
movie.

This past procrastination is finally
catching up with the NRC and with the nuclear
industry and we really need a serious investigation
of these issues.

You know, at Seabrook we have about 600
tons of this high-level radioactive waste stored in a
spent fuel pool and some in waste casks. We do not
feel that it is secure in either of those locations.

This waste cask storage site is a former
parking lot. It's surrounded by a chain-link fence. It's across from the visitor's center so I guess you can all see it on your way into the place. But we don't think that's a secure location.

It's a few feet higher than the plant, itself. We are on the coast, of course, in Seabrook. But it's still too close to the ocean. With the seas rising, storm surges are increasing, we really question whether that site would be good for another 100 years or even more. So, it's highly doubtful.

The NRC really needs to get to grips with the climate disruption issue. They need to be looking at what effects that's going to have on this waste especially if it ends up in the places it currently is.

Along with hundreds of other groups and many others here, we strongly support hardened on-site storage of this waste and removal of the fuel that's in the spent fuel pool as soon as possible.

After Fukushima it's really getting absurd for the NRC and the industry to argue that dry cask and wet pools are equally safe. We've had a live action, full-scale experiment with extended power outages and water pump loss and the casks remain safe at Fukushima while the pools boiled,
caught fire, exploded, you name it.

I think that should make the point pretty clearly that these two approaches are not the same and they do not make us equally safe.

We had a power station power outage at Seabrook back in March of 2001. It was not due to an earthquake or a tsunami, but just a run-of-the-mill Nor'easter. Fortunately several -- despite several problems, including pump failures, the emergency diesel generators did kick in and they did provide power.

But we should all recognize that our plants, especially at Seabrook, they only have four hours of battery power. That, again, is an absurd situation in the age of extended batteries. And we do not trust the current systems to really protect us in the case of a power outage.

And that's really what we're dealing with here whether it's due to an earthquake or due to a storm, it's the power going out that we have to be concerned about.

We can't afford to continue to maximize acceptable risk by filling or overfilling these pools while avoiding the cost of dry cask storage. We can pay some now to deal with this problem or pay much
more later. And we'd rather not pay for it with our
health and those of our children or grandchildren.

We abhor the continued arrogance of the
NRC to claim that they have confidence in dealing
with this issue when they've clearly just been
putting it off for future generations to deal with.

We heard from the spokesman from the
Seabrook plant back in 2006 that, quote,
"Environmentalists can submit as many plans as they
want. The decision on dry cask storage has already
been approved."

And that was from Alan Griffith, the
spokesman for Seabrook in 2006, seven years ago.
There's never been a public hearing on that site, on
the process. And to this day we haven't really heard
the details.

We're tired of the systematic arrogance
of the nuclear industry and the regulatory system.
We're glad the judicial process is finally calling
you out on this charade.

Passing this problem off to the next
generation once again is clearly not acceptable and
it's the reason that we're all here. We must have a
viable solution to -- before relicensing is done and/
or we start any new plants.
So, we do not have confidence in this process or in this GEIS and we think this is really what the NRC stands for, no confidence, no competence. Thank you very much.

FACILITATOR CAMERON: Thank you, Doug.

Nancy? This is Nancy Wrenn.

MS. WRENN: My name is Nancy Wrenn. I am a retired hazardous waste planner with the Massachusetts Department of Environmental Protection and a member of the Boston branch of Women's International League for Peace and Freedom and a board member of Mass Peace Action.

Both of these organizations have long opposed nuclear power plants. We are pleased that the Vermont Yankee Plant owners have decided to phase out this plant and we hope that a similar action will take place at the Plymouth, Massachusetts plant in the near future.

We concur that the nation has a very serious challenge in protecting the environment surrounding these plants and the many other aging plants in the country from hazards associated with storage of nuclear waste.

We are aware of the continuing pollution from the Fukushima plant in Japan and the apparent
impossibility of containing it.

We urge that as soon as possible all U.S. nuclear power plants be phased out in favor of renewable wind and solar sources of energy.

In the phase-out period the radiated nuclear fuel should be stored in concrete and steel dry casks which do not require electricity. Because, according to the Union of Concerned Scientists, they are passively cooled by natural air flow.

To protect against possible flooding in plants located on the coast, hardened dry cask storage as close to the source of generation as possible is recommended as an interim measure.

Scientists now claim that the irradiated nuclear fuel will degrade with age. This means that when and if a better storage option is possible, transfer of this more radioactive and thermally hot fuel from the casks will be extremely risky.

The NRC and the Nuclear Power Industry have us caught between a rock and hard place. We urge that these plants be phased out.

FACILITATOR CAMERON: Okay. Thank you, Nancy. We’re going to go to Leslie Sullivan Sachs and then to Gary Sachs and then to Anna Baker.

MS. SACHS: Hello. My name is Leslie
Sullivan Sachs. I'm with the Safe and Green Campaign which represents towns in 20 miles around the Vermont Yankee Nuclear Power Plant.

And we should be celebrating. A year from now Vermont Yankee will be closed and that means it will no longer be producing nuclear waste.

But we're not celebrating. We're not celebrating for the reason that we're all in this room. We don't know what to do with that waste. We don't know what to do with 40-plus years of this stuff. And like Doug said, we've been working on it for 40-plus years.

Vermont Yankee has 2,627 fuel assemblies in its spent fuel pool, seven stories above the Connecticut River. That's four times as many as it was designed to hold.

That's many more times than the fuel in Fukushima. We have had a whole series of visitors from Fukushima. We have been honored to have hosted Chikako Nishiyama who is a city councilor in one of the towns in Fukushima that was evacuated.

And my wish is that the people who make these rules spend time with the individuals who are impacted by the small risk. I see it over and over again in the 544-page document, small risk. I am
sure that they said the same thing about Fukushima.

The fuel pools are not protected by any redundant emergency systems or cooling systems nor are they housed in any robust structures.

The casks, the dry casks at Fukushima continued to function as they were designed after the disaster there. The spent fuels are attractive targets for terrorists. We love that in Vermont. Fly right over and go to Indian Point on the way.

All of the fuel pools should be immediately transferred into dry cask storage. Now, are we happy to have -- you know, I think we're going to end up with something like 60 dry casks on the banks of the Connecticut River. No.

But I live five miles from those spent fuel -- that spent fuel pool and the risks are undeniable. And the improvement, the reduction of those risks is equally undeniable when you move to dry cask storage.

I -- you know, in a few days, on November 8th, all of you in this room probably, because you follow the issue, will be holding your breath watching to see what happens in Fukushima when they attempt to move -

FACILITATOR CAMERON: Can I ask you to
wrap up, please, Leslie?

MS. SACHS: Sure. I'll wrap up.

FACILITATOR CAMERON: Thank you. Go ahead.

MS. SACHS: When they attempt to move those fuel assemblies out of the fuel pool. We don't need anymore lessons-learned from Fukushima.

FACILITATOR CAMERON: Thank you. Thank you, Leslie.

And, Gary, would you like to join us?

MR. SACHS: Gary Sachs, Brattleboro, Vermont. Mostly I'm here to give people a chance to heckle me if you'd like, since I've been heckling from the back room so please feel free to start in. Hope it serves you. I don't hear much. Keep going, keep going, Sally.

Oh, the NRC, it's my belief that if the NRC is not able to stop what occurs right now in Fukushima or if they're not able to stop the degradation of San Onofre's reactor of their steam generators, that it shouldn't be in the business of regulating nuclear power.

If you can't stop criticality, how can you regulate it? If you can't find the cause at Fukushima, how can you call yourselves a regulator?
In regard to this Environmental Impact Statement, I do not believe that leaving the waste for 50 years in the pool at Vermont Yankee will be anywhere near as adequate as putting the waste into dry casks.

That pool, again, as my wife said, is 50-feet, 60-feet off the ground. It's the Boiling Water Mark 1 Reactor. We've all seen the, Fukushima 1, Fukushima 2, and Fukushima 3. Except Fukushima 3 held plutonium in it. How much plutonium is damaging to the human body? Is it a one-hundredth of a gram?

How many pounds were in Fukushima 3? 500? But let's turn a blind eye to that. No, let's look instead and see what we're doing here.

Oh, we want to approve the NRC's GEIS. We want to say it's fine. You guys, go ahead, you've got it all under control. We know that, we trust you because you're so open with us.

I did hear the NRC say this year they don't think they should be under the control of the Federal justice system. Who do you want to be under the control of, Congress?

Markey's now a senator. He might be able to do something to have better effect with you.

It's my belief that CASE is entirely
paid, Coalition for Safe Energy, from my dealings with them. I consider grassroots to be individuals. I don't consider them to be paid informants.

We have a problem. We have a problem in terms of climate change and we have a problem in terms of nuclear power. Nuclear power is unnecessary. I don't consider it a clean energy source because -- oh, that was a nice - clean-air electricity. That was great. I'd never heard that before. Thank you. I'll get to look that up when I go home tonight. That's a new an acronym, clean-air electricity. Thank you very much, Slander, was that your name? No, no, no, I'm sorry, Sparford? Stoddard?

Thank you.

FACILITATOR CAMERON: Okay. That was Gary Sachs. And now we're going to go to Anna Baker. Anna? And then to Bruce Skud and David Agnew.

MS. BAKER: Hi. My name is Anna Baker and I come from the Pilgrim area. I'm 20 miles away from Pilgrim in Marshfield, Massachusetts.

I didn't prepare a statement tonight because I wanted to react to what was going on and be able to assess and think on my own and clearly.
And just to point out one of the frustrations I have with this discussion in general, one is that, as Mr. -- I believe it was Mr. Stratton said about clean-air electricity, it's really too bad that people from the climate front are pitting climate activists against nuclear -- or anti-nuclear activists because I think a lot of us are one in the same.

I, myself, consider myself a climate activist. I believe that climate change is real and it's one of the biggest generational fights we'll have. But I also believe that even though I don't consider myself anti-nuclear, I do believe that many of the nuclear power plants are threatening us with one of the biggest lifetime threats we'll ever have.

So we are not necessarily two different fronts. And I hope Mr. Stratton's point was not that you have to be pro-nuclear or pro-climate. You can be both.

But that also leads me to a point that I sort of touched upon which is that a lot of us are not necessarily anti-nuclear. You don't have to be anti-nuclear to believe that there are many problems at the current plants we have running.

Call yourself whatever you want, it
doesn't mean that Pilgrim, for example, doesn't have
a mass of problems that could eliminate our whole
geographic area and sacrifice our lives and
livelihoods.

The problem I think the public has with
this Waste Confidence rule is the word confidence.
And I was talking to a fellow who worked for the NRC
outside the room who was sort of nodding along with
me and saying you should give that feedback.

And I think the word confidence to the
public really means it's somewhat of a cocky
statement. In my mind it's like saying we have the
utmost confidence that everything will be fine.

Now, you know, the Japanese people were
promised this as well in Fukushima and look what
happened. So maybe a better use of the word -- a
different word would be good in this position. So
something like waste estimation rule, waste
assumption rule. I think confidence is really going
beyond what you can possibly, possibly believe in.

So I think that that word is pitting the
public against the NRC. And I think we need to work
together here as NRC's supposed to represent the
public and not the industry.

Lastly, I wonder if there are NRC
staffers who deduce that, given the problems at
Fukushima and given all the problems with the waste
that's building up at a lot of the sites, if the NRC
staff deduces that there is no -- that they don't
have confidence that the waste will be stored safely
is there a way, an outlet for these people to give
anonymous feedback?

Maybe there is no such thing as
certainty to some of the staffers that work at the
NRC and maybe they're too afraid to speak up to their
higher ups or to the government because they work for
the NRC.

Is there a way for people to give
feedback to the NRC who work within the NRC that
maybe there is no confidence that this waste plan is
a good one?

And I truly believe that a lot of people
who work at the NRC are now starting to rethink
whether or not confidence or this Waste Confidence
rule is something that they should back.

So I'm hoping that we can come to that
solution. Thank you.

FACILITATOR CAMERON: Thank you, Anna.
Thank you very much.

We're going to go to three more people
and then we're going to take a break for ten minutes.

And first we're going to go to Bruce Skud who's right here, then David Agnew, and then Ellen Ginsberg.

MR. SKUD: Thank you, Chip. My name is Bruce Skud representing No More Fukushimas, a grassroots group of citizens living near the Seabrook Nuclear Power Plant.

On behalf of public safety, we urge the NRC to continue the moratorium on licensing and relicensing of nuclear plants until a safe, national disposal site is up and running.

In the meantime, for short-term storage at plants we urge the NRC to require immediate transfer from wet storage to dry cask storage.

The U.S. has searched for a way to dispose of spent fuel for five decades. It has become an intractable problem. The closing of the Yucca Mountain facility demonstrated that planned facilities may never open even after billions of dollars has been spent.

Putting aside the formidable challenges of locating a geological site, governors and legislatures vigorously oppose the siting of a national repository in their states.
The reason for their opposition is that their constituents, including the business community, are adamant that they do not want a repository in their own backyard under any circumstance.

Let's be realistic, the fact that there is federal jurisdiction over the siting of a national repository means nothing. There's no question a national repository would create new and horrible safety problems.

In the remote possibility that a national repository actually opens it would result in tens of thousands of shipments of spent fuel across the nation, raising the specter of catastrophic accidents or terrorism.

If nuclear plants are required to have evacuation zones, shouldn't there be a similar requirement for these spent fuel transportation corridors?

At the end of the day is this new serious threat to national security really worth the environment and public safety risk?

At this juncture the only logical way to begin to effectively address the spent fuel problem is to limit the generation of new spent fuel by stopping the licensing and relicensing of nuclear
plants.

A moratorium would ultimately end production of spent fuel as operating licenses lapse. Obviously, the U.S. should still need to address -- would still need to address spent fuel that has already been accumulated.

Am I wrapping up now?

FACILITATOR CAMERON: Yes.

MR. SKUD: Okay.

FACILITATOR CAMERON: Thank you.

MR. SKUD: Basically, I want to say very briefly about short-term storage of wet storage. Shame on the Nuclear Regulatory Commission for supporting wet storage. Wet storage is inherently less safe than dry storage because it has to be backed up by electrical generation that could fail and dry storage does not require electric generation.

And at Seabrook there was a 4.0 level earthquake only 20 miles from the plant just a few -- just a year ago. And as Doug Bogen mentioned, it's destined to be coated with -- covered with water some day. Thank you.

FACILITATOR CAMERON: Okay. Thank you.

Thank you, Bruce.

And, David, David Agnew?
Oh, I'm sorry, David.

MR. AGNEW: Hi. Good evening. I'm David Agnew. I'm with a citizen's volunteer group called Cape Downwinders near Pilgrim Nuclear Power Station.

I'm grateful that the public comment period was extended for nearly a year; however, the fact that such a brief comment period was initially proposed indicates the NRC's disregard for public involvement.

None of the following comments are personal. When I say you, I'm referring to the agency and to the Commissioners as a whole, not the staffers.

It is telling that the NRC uses the term confidence when talking about safeguarding nuclear waste. That you dare use the word confidence when talking about safeguarding rad waste for hundreds of times longer than the entire Christian era is preposterous.

Lest you think I have nothing good to say about your regulatory agency, you may be glad to hear that I give the NRC very high marks, but only for hubris and audacity.

I wish to make it very clear how much
contempt I have for your hubris and audacity. But I recognize that although you are insensitive to the cancers and birth defects of many thousand generations to come, your staff are sensitive beings.

In deference to this sensitivity I have redacted all expletives from these comments. You have eliminated the risk of -- you have estimated the risk of a core melt with containment breach at a G.E. Mark 1 BWR at 1 in 1 million reactor years.

Actual reality has revealed the risk to be 1 in 352 reactor years. That's 200-- 2,841 times more likely than the NRC prediction.

You want us to believe another, [expletive deleted], probabilistic risk assessment, PRA, which assures that a high-level rad waste pool can't be drained by an aircraft -- I'm sorry, it assures us that a high-level rad waste pool can't be drained by an aircraft carrying C4.

I live near a, [bleep], Mark 1 reactor that's on a flight path for a major airport. There's no airspace restrictions. Even a partial drain down is likely to result in an inextinguishable, filthy, [bleep], uranium fire.

The only thing between a 747 and the spent fuel pool is a thin sheet metal roof. It's not
safe now and I have no confidence that it will remain
safe until it has thoroughly decayed about a half a
million years. Sorry, but for me there's no reason
for me to believe your PRAs.

The nuclear industry promised cheap,
safe electricity from reactors which would operate
for 40 years during which time its hellishly, God-
awful waste would be safely removed.

The industry has delivered on none of
that. Instead leaving its, [bleep], waste scattered
across the country. A gift to accompany increased
cancer rates for yet unborn generations.

You have allowed the owners to operate
with insufficient funds to properly decommission
their, [bleep], cancer factories until such time as
the financial climate may allow it.

The NRC colludes with the industry to
enable all of this and for what? For industry
profits and little else.

We don't need nuclear power. It is
completely unnecessary in Massachusetts. And the
nation can convert to renewable energy for the same
money now spent on nuclear and fossil fuels.

For a hazard that will last for
thousands of years, Waste Confidence is an oxymoron.
For a hazard that will last for hundreds of thousands of years, use of the word confidence is simply moronic.

We are seven decades into too cheap to meter and no one knows what to do with the industry's toxic waste. Whether the problem is NIMBY or scientific, the result is the same. No one knows what to do with the industry's [bleep] toxic waste.

I have another page, but I'll submit that in writing. Thank you.

FACILITATOR CAMERON: Okay. Thank you, David.

We have one more speaker before the break and that's Diego, Diego Garcia.

MR. GARCIA: Good evening. My name is Diego Garcia and I'm with an organization called North America Young Generation and Nuclear.

And I'm a nuclear engineer and I specialize in nuclear safety performance. Currently right now looking into the safety mechanisms for spent fuel pools on loss of all on-site power.

And, you know, I've dedicated all my schooling, my professional life to make sure that we can put our trust in nuclear energy. I did it because I am personally a climate change advocate.
And looking at the realistic solutions towards achieving clean air, the clean-air standards that we want in the timeframe that we want, clean-energy has to be the cornerstone.

MR. SACHS: It's too slow.

MR. GARCIA: Right now, right now we have -- we know the detail and characteristics of used nuclear fuel and how to design its containment and its protection. The record is clear from decades of operation in the U.S. and around the world.

I appreciate the opportunity to support the Commission's work in this area and to highlight the public's awareness to the scientific and engineering basis that gives me confidence as an engineer working with the numbers. That although the rhetoric might sound uncertain, it's backed up by numbers that engineers devote their lives to getting and the people put their trust in for our ability to safely manage used nuclear fuel.

But myths and scare tactics threaten this healthy discussion on the science and engineering of material safety systems. As engineers we welcome when people bring legitimate concerns that we can take a look at, that we can evaluate, and we can see if they're worth looking into and if they're
worth the rhetoric.

But when things escalate and we are unable to have a discussion on the merits, it's unhealthy for us to continue moving forward.

MR. SACHS: On the merits you have to have so many more -

MR. GARCIA: Gary -

FACILITATOR CAMERON: Gary, please, come on.

MR. GARCIA: -- I think tonight you're going to hear from a group of young people that are realizing that for a realistic change in climate -- to curb a changing climate we need to embrace new technology for nuclear energy.

And while it's not perfect, new generation of nuclear engineers like me are clearing regulatory hurdles to bring even safer and more reliable nuclear energy that is leaps and bounds from what we know today. And it keeps improving just like all the other technologies are improving.

Thank you very much.

FACILITATOR CAMERON: Okay. Thank you.

Thank you, Diego.

We're going to take a break. But, I just was informed that there's a tractor trailer
accident on Route 2 and it's closed in both directions. I don't know what that --

PARTICIPANT: Was nuclear waste on it?

FACILITATOR CAMERON: Pardon me? I don't want to -- I don't know what that means to anybody, but I just wanted to tell you that, okay, in case it is important to someone.

PARTICIPANT: We're here all night. We're stuck.

PARTICIPANT: You've got us here all night.

FACILITATOR CAMERON: Well, you know, that's why I didn't want to make this announcement. But let's take a ten-minute break, okay.

And we'll get started -- we're going to get started with Genevieve Byrne, okay. So in ten minutes we'll have Genevieve up at the podium.

(Whereupon, the foregoing matter went off the record at 8:34 p.m. and went back on the record at 8:49 p.m.)

FACILITATOR CAMERON: We're going to get started if everybody could come back in.

(Brief pause.)

Okay. We're going to get started. Is anybody here from St. Louis? Okay. Well, I can
safely announce that the Redskins are the Redskins.

    The Penguins? No. The Red Sox are ahead 1 to nothing. Okay.

    Okay. And I'm going to try to -- we want to try to get everybody out of here so you can watch the end of the game. So we're going to be trying to move through quickly on this part of it.

    We're going to go to Genevieve, Genevieve Byrne. And Genevieve’s right here. Then we're going to go to Don Tilbury, Chris Williams, and Karen Vale, okay. All right.

    MS. BYRNES: Hi. My name is Genevieve Byrne and I'll be speaking on behalf of the Project for Energy Accountability and the Concerned Neighbors of Pilgrim.

    And I'm primarily going to be speaking to the dry cask storage facility currently under construction at Pilgrim.

    But first I'd like to comment on the generic nature of this Environmental Impact Statement and urge the NRC to undertake a site-specific review of reactors seeking to continue to store spent fuel onsite.

    There are reactors like Pilgrim that should not be included in a Generic EIS because site-
specific conditions make long-term fuel storage an
incredible risky undertaking.

Entergy began construction on the ISFSI
at Pilgrim a year ago and has sited the facility 106-
feet from the ocean at an elevation of 24-feet above
sea level. Entergy failed to obtain any local zoning
or construction permits for this facility until
citizens notified the town that construction was
underway.

Entergy then applied for and received
local zoning permits; however, relying heavily on the
idea that the NRC provides oversight and regulation
of dry cask storage facilities and nuclear waste
generally, the town rubber stamped Entergy's
construction and did not require public hearings or
environmental review regarding this multi-million
dollar project.

Plymouth citizens have appealed the
town's decision to Massachusetts land court. Judge
Foster is hearing the appeal and recently ordered
Entergy to notify him directly 90 days prior to
storing any nuclear waste.

He has taken citizen concerns seriously
and warned Entergy that they are continuing
construction at this site at their own risk.
Entergy has stated that the ISFSI site will be safe over the long run in terms of flooding, sea-level rise, and coastal erosion because the site falls within the design conditions of the plant, itself—conditions established when the plant was built 40 years ago and based on storm surge data from the 1600s through the 1960s.

No Entergy or NRC representative has been able to identify any updates to this data. As of today there has been no site-specific environmental review of Pilgrim's ISFSI either at the Federal or the local level.

I hope you can understand why citizens can see this as a cause for alarm. In the United States we have reactors located on major freshwater rivers, the Great Lakes, the Atlantic and Pacific Oceans, and in the Gulf of Mexico in 31 different states.

The environmental impacts of long-term dry cask storage, or any fuel storage for that matter, are not essentially the same in each of those locations. Thank you.

FACILITATOR CAMERON: Okay. Thank you. Thank you very much. We're going to go to Don Tilbury, Chris Williams, Karen Vale, Steve Stamm,
Sally Shaw, and Ellen Ginsberg. That's our next five. And this is Donald Tilbury.

MR. TILBURY: Good evening. And thanks for the opportunity to speak. I live in Hampton which is right next to Seabrook.

FACILITATOR CAMERON: I'm sorry, Donald. I'm sorry for interrupting you. But I just wanted to ask people to just speak closer to the mic. There's people in the back who are having trouble hearing.

MR. TILBURY: Is that better? Yeah.

The only thing I want to say is that when Seabrook was built it was designed with a place to put these spent rods into a pool. Shortly thereafter it wasn't big enough so they got the idea that they could double up in the pool, and that was risky.

And now they want to put them into casks and that's a hopeful afterthought, that's my only opinion, it's an afterthought. Forget the engineering, they don't know what to do with it, it's just an afterthought.

FACILITATOR CAMERON: Okay. Thank you. Thank you, Donald. All right.

And we have Chris Williams now.

MR. WILLIAMS: Chris Williams. I'm a
Vermont organizer for the Citizen's Awareness Network. I've got my executive report, executive summary, got my CD. This is very, you know, big stuff. This is a lot of pages, a lot of material. I'm going to be submitting some comments in writing.

I remember when the Waste Confidence rule came out in the 80s. And it's basically a way for the DOE and the industry to cover, to cover themselves for not coming up with a solution to the back end of the nuclear production cycle for commercial electric plants.

So I'm going to make some comments in writing. But, you know, I want to take just a couple minutes, because that's all I've got, to talk about the reality of something now that we're having to face in Vermont now that Entergy has announced that they've lost enough money and they've given up.

I want to remind everybody that Entergy was amongst a group of large utilities who back in the 90s made the case that they wanted free markets and open markets for energy and we need, you know, vigorous, you know, market competition.

Part of their announcement in closing Vermont Yankee was these markets are flawed and messed up and they just don't work. And I just
wanted to make that note.

So in Vermont we're going to close Vermont Yankee down in one year. And when it closes we're then going to have to deal with decommissioning and the spent fuel. There's about 800-tons sitting in the pool at Vermont Yankee about 120 miles from here.

It's going to cost, according to Entergy, a little over a billion dollars to decommission the plant. A billion dollars. Because, as part of their sales agreement in 2002, Entergy, insisted — and the State of Vermont foolishly agreed — that they wouldn't make anymore contributions to the decommissioning fund. We, in Vermont, have $580 million.

Entergy has the option to go into safe store and they also have the option in safe store to not move anymore of that fuel out of that pool for up to 60 years.

NRC, this is real. This isn't, you know, generic, this isn't theoretical. We need your help. We need your understanding. We need action.

We have $580 million. That $580 million will only grow if the market's gone. It actually lost money in 2008 when the markets went down. And
like everybody's IRA, it came back a little.

We need the NRC to get a grip on reality and to help us. We cannot have the fuel in the pool for 60 years or 40 years or 20 years. We need it expeditiously moved out of the pool and into dry casks. And that's going to cost hundreds of millions of dollars that we don't have.

I hope the staff is writing this down because this is going to be a big problem at other merchant facilities. A big mistake was made when we moved into the merchant mode with these plants. And now we're seeing the reality unfolding in Vermont.

So I would ask that you, you know, take a moment as you're working on your Confidence ruling here or Confidence rule here and get a grip on reality with regard to leaving that much waste in a pool at a single reactor site for 60 years.

I have no confidence. The State of Vermont has no confidence. The New England region doesn't have any confidence. And if you put it out there to the regular people all around this country, there's not a lot of confidence to be had with such a foolish plan. Thank you.

FACILITATOR CAMERON: Okay. Thank you.

Thank you, Chris.
And this is Karen Vale.

MS. VALE: Hello. I'm Karen Vale. I'm a campaign manager at Cape Cod Bay Watch, which is based in Plymouth, Massachusetts, home of the Pilgrim Nuclear Power Plant.

Can you guys hear me okay? Okay. So I just have a couple general comments tonight. We will be submitting more detailed comments at a later time. But tonight I'm just going to mention a couple things.

And both are related to the impacts of climate change. And this is including sea level rise and temperature on the continued storage of spent fuel in the wet pools.

My first comment is that the draft GEIS estimates that sea level will rise less than 1 meter by the end of the century and this will not endanger any U.S. nuclear power plant.

However, sea level rise will vary greatly by region. It's inaccurate to assume a blanket 1 meter rise for all plant locations and then conclude that all plants will not be in danger.

1 meter is a global average. It's been projected to be -- that it'll be much less in some areas. But it's also projected to be -- that it'll be
much greater in some areas as well. Areas like the Eastern seaboard where many nuclear power plants are currently sited.

Areas projected to experience the most significant sea level rise should be addressed in the GEIS using a global average to assume all plants are safe is a flawed approached.

Just as an example, the projection of sea level rise for Cape Cod Bay, and this is where Entergy's Pilgrim nuclear power plant is located, ranges between 4 and 6-feet by 2100. And it's also projected that this rise will come with an increasing severity of storms, surge, and wave action on top of the higher water levels.

My second comment is that the draft GEIS does not consider the impacts of rising temperatures on the water sources intended to cool the spent fuel pools. As an increasingly warming climate is heating the water temperatures of our oceans, lakes, and rivers, water is becoming too warm for plant's cooling systems.

Cooling systems are only approved for certain incoming water temperatures and their ability to operate properly and safely has not been proven under higher temperatures.
Warming water's an increasing problem. For example, just this past summer Pilgrim had to power down several times due to the water in Cape Cod Bay warming up and exceeding the 75-degree limit.

Now, generally appears -- it appears that the bay is warming. And in recent years its average summer temperature has been several degrees warmer than its mean for the last century.

If this issue is included in a future version of the EIS, a generic version would be unable to properly assess how individual plants would be affected. Plants have different equipment, different ages of infrastructure, different environmental conditions and changes. It's much more complicated than could be covered in a generic EIS.

As with sea level rise, the NRC should consider a worst-case scenario for each facility then we might know if mitigation strategies, such as chillers, for example, would be required to sustain the temperature of wet pools during extended heat waves.

That's all I have. Thanks for your time. And, again, we'll be submitting more detailed comments at a later time on these issues as well as other concerns and issues we have with the GEIS.
FACILITATOR CAMERON: Okay. Thank you.

MS. VALE: Thank you.

FACILITATOR CAMERON: Thank you, Karen.

And Steven Stamm now and then Sally Shaw and then Ellen Ginsberg.

MR. STAMM: Thank you, Chip. My name is, as you probably heard here, is Steven Stamm. I'm retired. I worked for Shaw Stone, and Webster which was in the business of building -- designing and building nuclear plants as well as spent fuel storage facilities; however, I retired about two years ago.

I have been active in the American Nuclear Society as vice chair of the National Standards Board and I am a former U.S. Navy nuclear submarine officer. And so I'm pretty familiar with nuclear power and a lot of the aspects of it; however, I'm not speaking on behalf of these organizations. I'm speaking on behalf of myself as a concerned citizen.

And first of all I'd like to commend the NRC on having these meetings and giving the public an opportunity, including myself, to attend and to speak on these issues and to voice our thoughts, and each of our thoughts on these issues.

And I would like to also say that
Chelmsford obviously is a good location for the Northeast and I think the turn out reflects that.

I would like to voice concern, irritation, and displeasure at our government, including the NRC, on what happened with Yucca Mountain. We spent over $9 billion of evaluations and designs to a facility and then turn around and for political reasons without a fair hearing basically have suspended work on it. That's a crime.

And it's us as taxpayers in the time when we're talking about budget deficits and what's going to happen, to have that money wasted is unconscionable.

There have been multiple reports dating back as far as 1945. And all of them concluded that out of, you know, they looked at options but that Yucca Mountain was a good site for repository and it was better than the other options that were being looked at.

The fact that that has been going on for 50-plus years, 60 years and it can't come to fruition gives us no confidence that any type facility could ever be built by our government.

And so anything that needs to look at needs to take that into consideration. It might be
possible for private enterprises to build such a facility, but they're not going to do it on, you know, without some financial support.

Based on past performance that I can't see how anybody would have any confidence at all that such a facility could be built by our government. However, on the other side, fuel from our reactors -- and I know some of you are not in agreement -- but fuel from our reactors is currently stored safely. Some in pools and a lot of it is in dry cask storage facilities.

And the -- I think that we need to give them credit. And obviously your -- you need to voice concerns when you have them specifically and I think you've been doing that.

But while we don't have a central repository, I think it's important that we have a more than acceptable, a good system, and a safe system for storing the fuel that we have.

And I think that this report goes in that direction and I think it's technically acceptable to do that and it does it.

So thank you very much.

FACILITATOR CAMERON: Okay. Thank you.

Thank you, Steven.
And we're going to hear from Sally Shaw now and then Ellen Ginsberg.

PARTICIPANT: The chairman recently found enlightenment so I wanted to give some opinion. And we're hoping that the Nuclear Regulatory Commission will likewise be enlightened. Thank you.

MS. SHAW: My name is Sally Shaw. I live in Gill, Massachusetts, near the Vermont Yankee nuclear reactor. The U.S. Court of Appeals, D.C. Circuit, found that NRC's Waste Confidence rule was deficient.

The Court in its background comments stated: Even though it was no longer useful for nuclear power, spent nuclear fuel poses a dangerous long-term health and environmental risk. It will remain dangerous for time spans seemingly beyond human comprehension."

The day that The Court made that statement was a really great day for me.

In 1997 a report for the NRC by Brookhaven National Laboratory found that a severe pool fire could render about 188-square miles uninhabitable, cause as many as 28,000 cancer fatalities, and cause 59 billion -- cost $59 billion in damage.
Based on a technical study of spent fuel pool accident risk at decommissioning nuclear power plants in 2000, the U.S. NRC conceded that the possibility of a Zirconium fire cannot be dismissed even many years after a final reactor shutdown.

Yet the NRC is confident that what has happened at three reactors in Japan due to loss of power, loss of cooling capability, and hydrogen explosions could never happen here in reactors of nearly identical age and design.

And because they think it could never happen they do not really consider the consequences. This is faith-based science. We should not be creating any more highly irradiated nuclear waste until real science comes up with a solution.

If they are so confident, the NRC should put its money where its mouth is and require all new and recently renewed operating licenses to be put on hold and shut the reactors down until the nuke waste solution that they have been saying is just around the corner for the past 30, 40 years is built and in place.

When the NRC ignores actual experience while relying on theoretical and wishful probabilities, we, the people, have no confidence in
According to an article revealing failure of concrete storage systems for melted and damaged fuel from the Three-Mile Island meltdown, the concrete modules are showing significant cracking and degradation even though they were built in 1999 to last for 50 years.

NRC said in the letter, which is dated April 7th: “The Department of Energy has analyzed the structural integrity of the modules which have walls 2-feet thick and determined that the problem is getting progressively worse,” NRC said.

NRC staff scientists declared that a nuclear fuel fire and fuel exposed to air cannot be ruled out even in the oldest fuel.

In the U.S. NRC's NUREG-1738, spent fuel pool accident risks at decommissioning nuclear power plants, for Vermont Yankee boiling water reactor, it states that the critical failure mode for the gross structural failure of the pool is an out-of-plane shear failure of the pool floor slab.

With this failure mode the liner will be breached and a large crack will develop through the concrete floor slab within a distance equal to the floor slab thickness from the pool walls. Possibly
the entire floor will drop out, but I think that such
a gross failure is unlikely. However, the concrete
crack will be sufficiently large that the water in
the pool would quickly drain out.

Under NEPA, an EIS is intended to
carefully investigate the environmental impacts of a
potential action. One of NRC's assumptions
underlying their opinion that the impacts of spent
fuel storage can be considered generically, not on a
site-by-site basis, is that changes in the
environment around spent fuel storage facilities are
sufficiently gradual and predictable to be addressed
using a generic approach.

This assumption clearly ignores past
experience and the realities of a changing global
climate. It ignores the very real possibility of
severe storms and extreme circumstances.

FACILITATOR CAMERON: Can you wrap up
for us, Sally, please?

MS. SHAW: I will try. There is no such
thing as a probability weighted consequence; however,
there is such a thing as an unacceptable consequence.
That is what the NEPA process, if it worked, would
uncover, preventing catastrophically stupid
alternatives from being acted upon.
The public and The Court wants to know if X happens, Y will result. It's the NRC's responsibility to investigate and describe in detail Y the consequences. They have shirked this responsibility again. The Waste Confidence GEIS is flawed for the same reasons as the original Waste Confidence decision.

Okay. Can I just make a final comment?

FACILITATOR CAMERON: Go ahead.

MS. SHAW: All right. I support the no-action alternative decisions regarding highly irradiated fuel assemblies should be made on a site-by-site basis with maximum public input.

But the NRC, meanwhile, needs a paradigm shift. Instead of trying to convince us over and over again that a small risk outweighs a huge consequence, maybe NRC should face the fact that sometimes consequences are so unacceptable to the people and the environment that they outweigh even the smallest theoretical risk. Thank you.

FACILITATOR CAMERON: Thank you. Thank you, Sally.

And we're going to hear from Ellen Ginsberg, then we're going to go to Herb Robinson, Kelsi Morris, Hattie Nestel, and Peter Katzen. And
this is Ellen Ginsberg.

MS. GINSBERG: Good evening. I'm Ellen Ginsberg. I serve as vice president general counsel for the Nuclear Energy Institute. NEI's members include all commercial operating reactor licensees.

I appreciate the opportunity to offer comments on behalf of NEI and its members this evening. We will be providing written comments and my comments this evening are intended to supplement and support those comments which we will later provide.

Tonight there have been many questions, as there have been in previous meetings, regarding whether the NRC can and should generically address the so-called Waste Confidence issues.

I'm here to explain my view and to provide some input and information regarding how that question has been answered by the courts. The bottom line is the question has been answered in the affirmative both by the courts and by the Commission.

As time is short, I will largely limit my comments to the legal basis for proceeding generically as reinforced by both the early decisions by the U.S. Court of Appeals for the District of Columbia in Minnesota v. NRC, which case was the
first case to prompt the NRC to review the environmental impacts following license expiration, but before disposal -- pick up for disposal.

But before I even mention my analysis of that decision, I wanted to mention also that the Supreme Court, itself, has affirmed the Commission's longstanding practice of considering environmental issues through rulemaking in appropriate circumstances.

Thirty years ago, in 1983, the Supreme Court in a case some of you may be familiar with, Baltimore Gas and Electric, concluded that the generic method chosen by the Agency is clearly an appropriate method for conducting the hard look required by NEPA. That's exactly what the NRC is doing with this rulemaking.

So returning now to the initial decision that addressed Waste Confidence, which was the Minnesota v. NRC decision, I would highlight that the Court of Appeals said they're very -- in a very straightforward fashion where factual issues do not involve particularized situations, an agency may proceed by comprehensive resolution of the questions rather than re-litigating the question in each proceeding in which it is raised.
Parsing the issue further, the Court in Minnesota --

MR. SACHS: Remember what happened in Fukushima.

MS. GINSBERG: Parsing the issue further, the Court in Minnesota said we agree with the Commission's position that it could properly consider the complex issue of nuclear waste disposal in a generic proceeding such as rulemaking and then apply its determinations in subsequent adjudicatory proceedings.

Applying the legal principles set forth in Minnesota, which were also affirmed in the 2012 decision on the most recent revisions to the Waste Confidence rule, the Commission now has directed the NRC staff to prepare a GEIS and rule.

This responds to the remand. NR- -- NEI supports the Commission's approach. We believe it's both legal and, as a practical matter, appropriate.

The present rulemaking evaluates the environmental impacts from continued storage of spent fuel after the end of the reactor licensed life or operation but before it is placed in a repository. This rulemaking does not substitute for licensing actions that require site-specific NEPA analysis such
as original licensing.

The NRC's EIS on the instant issues does account for conditions at all reactor sites. We also support this rulemaking because it's a reasonable use of NRC, licensee, and public resources. It avoids duplicative and inefficient site-specific reviews of continued spent fuel storage issues.

We thoroughly concur, as well, that, for example, the no-repository scenario affects all sites similarly.

Further, there's been no evidence presented that suggests that the issues of potential leaks or fires require site-specific consideration. The GEIS includes well-supported bounding analysis, which is to say these analysis encompass all reactor sites and operations.

Although much has been made tonight and previously of the need for individualized determinations, the Supreme Court and the Court of Appeals have already said that the feasibility of interim or ultimate nuclear waste disposal solutions is one that is essentially common to all nuclear facilities.

In our view, it is most sensibly treated as such. Thank you very much.
FACILITATOR CAMERON: Okay. Thank you.

Thank you very much.

Now -- and now we're going to go to Herb, Herb Robinson. And after Herb we'll go to Kelsi Morris and then Hattie Nestel and Peter Katzen.

This is Herb Robinson.

MR. ROBINSON: Yes. My name's Herb Robinson. I graduated from the engineering college at Cornell in the top quarter of my class. And I'm a year shy of having 40 years' experience developing complex reliable systems.

I can't say exactly where, but shall we say if what I've helped develop -- or what I develop personally -- disappeared, most of your credit cards would stop working and so would most of your cell phones. So I know my stuff.

Now, I only had maybe an hour and a half to review this document so I spot checked. You know, nobody's paying me to do this, nobody gave me talking points. And I hadn't seen the list of questions that they really wanted to answered.

But it turns out within an hour and a half I'd spotted one of them anyway. And that's the issue of indefinite storage. And one of the things people haven't mentioned is the timeframe for
indefinite storage is a million years according to
the EPA, just to put that into perspective.

So I obviously don't believe the
document adequately addresses the environmental
impacts of indefinite time storage.

And, for example, Section ES.9 of the
executive summary states that the indefinite
timeframe is highly unlikely. This would appear to
reflect a myopic and naive assumption that a
repository will become available.

That's in the face of mounting evidence
to the contrary. We must face reality. The Yucca
Mountain team consisted of the best people we have
and they had unlimited resources, yet they failed.
They didn't fail due to incompetent management nor
did they fail for lack of resources, they failed
because they were given an impossible task.

There is a parallel situation here. The
document doesn't properly address the environmental
impact of the indefinite timeframe because that is an
impossible task. We should be using proper
engineering methodology. And we better be talking
engineering here, not experimental science projects.

Proper engineering methodology uses
proven technology to achieve a practical result.
There is no proven technology to displace something for a million years. Not for 100,000 years, not even for 10,000 years.

The longest lived man-made structures I know of are the pyramids. They've been around for 5,000 years and they failed at their intended purpose in prehistoric times.

There's not a really very good track record here. And yet this document is making the assumption that government will remain unchanged, that everyone will follow the rules, and that there will be no accidents for a million years.

This reminds me a lot of Lily Tomlin asking for a dime on Saturday Night Live. It's a joke and it's a rather bad one.

There is this little thing called entropy, or Murphy's Law for the colloquial term, and that isn't addressed by this document at all. So just how stupid is this? Let's spot check the document.

The NRC concludes in Section 4.1.3 that the impact of indefinite storage on land use will be small.

How does that jive with real world engineering experience? We don't have many examples
in this area, but we do have one rather significant
one, Fukushima Daiichi. That's the best real world
data we have now. That says that every 50 years we
will have a major leak of high-level nuclear waste
that will render about 250 square kilometers unusable
for a million years.

That works out to be 5 million square
kilometers or about one-thirtieth of the land area of
the entire world. I claim that's catastrophic, not
wrong.

FACILITATOR CAMERON: And, Herb, could
you --

MR. ROBINSON: But my estimate is based
on real world experience and EPA requirements. So,
in closing, I want you to remember the wisdom here is
to understand that we don't know. And that's the
most important part of the problem. Thank you.

FACILITATOR CAMERON: Thank you. Thank
you, Herb.

Is Kelsi, Kelsi? This is Kelsi Morris.

MS. MORRIS: Hi. I'm Kelsi Morris. And
I'm here also on behalf of CASEnergy Coalition.

Spent fuel is currently being stored
onsite in well-designed, well-protected facilities in
storage casks that are designed to avoid a wide range
of threats.

That's not to say, that's not to say that we don't look forward to, and are not open to, the evolution of these devices and technologies.

MS. SACHS: I think 100 needs to be changed to -

FACILITATOR CAMERON: Gary. Gary, come on.

MR. SACHS: Hey --

FACILITATOR CAMERON: Listen, just let her -- let her speak, please. Let her speak.

Go ahead.

MS. MORRIS: Over the last 30 years nuclear energy facilities have safely and securely stored used fuel in these structures. American nuclear energy undergoes the most rigorous safety precautions and inspections in the world with the operating facilities subject to on-site inspections by NRC staff 24 hours a day/7 days a week/365 days a year.

Nuclear energy safely and cleanly provides nearly 20 percent of our electric power with absolutely zero GHG omissions and supports more than 100,000 high paying jobs.

Nuclear energy has a crucial impact on
America's energy portfolio and thus a timely resolution of this rulemaking is important for long-term power planning. This issue halts the building of new reactors and ultimately puts a delay on our energy efficiency.

As the Commission continues these public hearings, I would just like to reiterate that nuclear energy has shown the utmost commitment to safely and securely storing spent fuel. Thank you for your time today.

FACILITATOR CAMERON: Okay. Thank you, Kelsi.

And is Hattie, Hattie still here? Hattie. This is Hattie Nestel.

MS. NESTEL: This seems -- feels like an exercise of futility because our words are really meaningless to the NRC. But I guess it's a good way to communicate with each other and vent about our frustrations.

I want to acknowledge one person that was the head commissioner of the Nuclear Regulatory Commission, Gregory Jaczko. And Gregory Jaczko was going along and getting along just fine until Fukushima.

And he went to Fukushima and he was...
really impacted by the human cry that was everywhere and the people whose lives were destroyed even though they were alive. Their families were no longer together, their agricultural land was no longer useable, their children were terrified of grandchildren having cancer, which now 45 have thyroid cancer that have been tested so far.

And he came and said Americans living in Japan should evacuate out 50 miles from Fukushima. And in essence he was ousted from the NRC with those words. That was the end of his career. It was very courageous of him.

And he came back and he wasn't -- it wasn't a unanimous votes anymore to license new plants in South Carolina and Georgia or relicense Pilgrim, for example. It was 4 to 1, 4 to 1. He voted against and against and against and he started speaking the truth.

And he really suffered the consequences like all whistleblowers do. The NRC doesn't want to know the truth. And what he said was I really want to give him this credit, "All 104 nuclear power reactors now in operation in the United States have a safety problem that cannot be fixed. And they should be replaced with newer technology. Continuing to put
Band-Aid on Band-Aid is not going to fix the problem."

He continues to speak and he was in Boston a week or two ago and he spoke about Fukushima won't happen again. But believe me, a nuclear accident will occur somewhere and this is wrong. Unless we can guarantee that there will never be an accident again, we have to shut all these reactors down and for renewables.

Prime Minister Kan, Naoto Kan who was prime minister during Fukushima, has admitted his shame in believing that nuclear power could have ever been safe. He -- that's unusual for a world leader to say he was mistaken. You never hear that. I made a mistake. He admits he made a mistake. And he has anguish in his heart for the suffering that he sees in the people of Japan.

And the fear in the world for anybody who has half a brain or a third of a brain or an IQ of over 60 maybe to not be afraid of what is coming out of Fukushima at this time.

The other point I really want to bring up is the lies that have come down from Entergy and been completely ignored by the NRC. At Vermont Yankee 11 people, top people in the Entergy
corporation, swore under oath at the Department of Public Service that there were no underground pipes that could possibly exist or leak.

FACILITATOR CAMERON: And, Hattie, could you finish up?

MS. NESTEL: They were caught in their lies. Confidence, give me a break. For the good of humanity we have got to stop this somehow. Thank you.

FACILITATOR CAMERON: Thank you, Hattie. And is William Maurer? And is it Bill? Bill, could you please join us and then we're going to go to Ann Darling, Dave McNeish, and then Rod McCullum.

MR. MAURER: Hi. Good evening. My name is Bill Maurer. I come from Falmouth, Massachusetts. I'm a member of the Cape Downwinders.

And I'm here about Pilgrim. I didn't really make any -- I didn't make any prepared comments, but I just wanted to tell you a little bit about our experience with Pilgrim and their building of a dry cask storage area.

And I think it speaks to the Entergy culture similarly to the way Hattie -- Hattie's experience was up at Vermont Yankee.

You know, we're watching Pilgrim morph
into a -- from an energy-producing plant to a dry
cask -- to a nuclear waste storage dump. And they
started this, as Genevieve said, without any
permitting at all.

And it was only noticed by citizens from
an aerial photograph that saw some scarring on the
ground that looked like construction activity. And
so we called up the nuclear -- we, like, we e-mailed
the Nuclear Regulatory Agency, a Mr. Dean I think is
who I exchanged e-mails with.

And he reported that Entergy was just
doing preliminary work. You know, grading, cutting
trees, moving material around.

We went down to the building department
and found out, well, they didn't have any permits for
any of this yet and that they were actually pouring
concrete for the approached slabs, the heavy-haul
path, and the turning slabs. And they were getting
ready to build the retaining wall.

So what they did was they applied for a
fractional permit. They didn't apply for a permit to
build a nuclear waste dump site. They applied for a
permit to build a retaining wall so that they could
build the slab where the pads go.

By doing that, they avoided a
comprehensive review of the project. This was done by design. They started the construction before having permits. This is a company that's got permits for administration buildings, sheds for equipment, meteorological towers, parking lot changes, tents to have -- they get permits for tents to have functions outside that they can't do inside.

And so now they're building a nuclear waste dump site without any permitting at all. You know, this is not a casual mistake. So that's the culture of Entergy.

And it just boggles my mind that in the town of Plymouth it is harder to get a permit to put a deck on your house than it is to get a permit to build a nuclear waste dump site.

There's another aspect to this about oversight. And, you know, the whole thing about, you know, Federal oversight versus municipal oversight. Everybody's afraid of the NRC. They're big dogs. And not too many people went against you.

And these little host towns know that they can't afford a fight with you. And so in talking to William Dean I learned that Entergy and any of these host communities do not have to file plans with the NRC prior to building a nuclear waste
dump site at an existing reactor.

What happens is the NRC goes out, takes a look at the construction after it's built, and issues a certificate of compliance. So there's no preliminary review.

Nobody reviewed the siting of the pad, you know. This is incredible.

FACILITATOR CAMERON: And could you --

MR. MAURER: This is not oversight.

FACILITATOR CAMERON: -- wrap up for us, too, Bill?

MR. MAURER: Okay. That's it. That's all I got to say.

FACILITATOR CAMERON: Thank you, though.

Thank you very much.

Ann, this is Ann Darling. And next we're going to go to Dave McNeish and then Rod McCullum.

MS. DARLING: Okay. Hi. I'm Ann Darling. I live in Brattleboro, Vermont. I'm a member of the Safe and Green Campaign. We are comprised of folks who live in 20 miles of the Vermont Yankee nuclear power facility.

A couple of things, one is I've -- I just get so tired of hearing people say that nuclear
power is clean. And I just want to say that we learned with the environmental movement that good science means when you're talking about fuel of energy production you have to look at the whole life cycle.

You have to look at mining, you have to look at when you make the energy, and you have to look at how you deal with waste.

So, I mean, look at coal. We're all up in arms about coal because of all the strip mining and what do we do to clean the air after it makes the energy?

The same thing has to go for nuclear. There is just nothing clean or green about it. We all should have learned something about this lesson as children, though, I want to say. And I'm a mother and I'm going to sound like one.

If you play, you have to clean up after yourself. And if you do not, you get your toys taken away. That's the way it goes.

MR. SACHS: Clean up your mess before you make a new one.

MS. DARLING: Exactly. I agree with you. So I first came to Vermont in 1972, the same year that Vermont Yankee was built. And at the time
I took a tour of this sparkling new facility and I was in awe. I was like the bridge the bridge of the Starship Enterprise, I mean, it was just amazing.

And I just, you know, 40 years later I'm in a very different place. I've moved from awe to deep, deep fear. I've been to NRC hearings before, I've read all kinds of things and I've studied the issues. I've never heard anything from the NRC that has made me feel safe.

And, in fact, I am more afraid listening to the NRC because I can see that you are colluding with the industry that you are supposed to regulate. You may know more about nuclear engineering than I do, but I knew -- know that you are not keeping me safe.

I do not have to be a nuclear engineer to know that dry cask is safer than an overcrowded spent fuel pool on the banks of my beautiful Connecticut River or on the banks of Massachusetts Bay.

I will repeat what was said before, shame on you for ever saying otherwise. I'm going to sound like a mother again, shame on you. This is supposed to be a democracy in which the common citizen has a voice, but you are not listening. We
need your help and not what Sally called your faith-based science.

And I have no confidence in what you are doing with the GEIS and I would like to, but I do not.

FACILITATOR CAMERON: Thank you, Ann. And, Dave, Dave McNeish?

Let's go to Rod. This is Rod McCullum.

MR. MCCULLUM: Thank you, Chip. And by way of introduction I would like to say that nobody is more interested in seeing used nuclear fuel leave the reactor sites that it's currently stored at than I am.

The reason for this is the last 15 years of my career I have been working for the Nuclear Energy Institute. I currently work as director of used fuel programs there towards this very goal, towards moving used fuel to safe geological disposal.

I continue to work towards it because I know we'll get there. I know because in Sweden and in Finland they're within a decade of safely disposing of their used nuclear fuel in geological repositories already under development.

I know France is not far behind. And I can't imagine that our country would ever come in too
far behind France in anything.

You know, I'm heartened. During the 15 years I've been doing this as the work has shifted from disposing of it in the near term to storing it in dry cask and pools, which we do both of those things safely, I've had a chance to work with some of the brightest professionals I could have ever imagined meeting.

The engineers, the scientists who formed the technical foundation which keep the risks in the casks and the risks in the pool so low. I'm so heartened today to see all these young people who are devoting their careers to the same cause. It is indeed noble work and it is work that has been well done.

I'm also heartened to see that we have not only robust engineering, but we have robust public process. We've had a lot of energetic discussion here. A lot of strong views on both sides. That's what makes America a great country. This is part of our process. And I thank NRC for providing that.

It reminds me of my favorite Winston Churchill quote. Winston Churchill once said, "Democracy is the worst system of government ever
known to man except for all the others."

And American democracy I think is particularly good at being at least not as bad as all the others. So while our legislative and executive branches take their time trying to stay up with France on geologic disposal, our judicial branch has directed the Nuclear Regulatory Commission here to look at the what ifs.

What if we don't dispose for these incredibly long periods of time? And they have done a credible job at looking at those ifs. We all need to understand these are what ifs. These are bounding scenarios.

They've talked about things like 60 years in pools. Since dry cask storage was invented the average plant goes to dry cask storage 11 years after it shuts down.

They've talked about putting dry-transfer facilities at every site. That won't happen. We'll use portable systems and every 100 years we will continue to license them well beyond 100 years.

There is a lot of technical information already in the license applications. That's why NRC went from 20 years to 40 years on license renewals.
Those licensing processes will work faster than global warming.

MR. SACHS: -- a question.

FACILITATOR CAMERON: Please let him talk.

MR. MCCULLUM: So, you know, we've got risk studies. Some of them are in the EIS on casks and in pools. We'll be introducing some more in our comments and scientific studies.

The risks are incredibly low on both sides. The spent fuel study, so called earthquake study, that has been cited here on several occasions the fundamental conclusion of this study is that after a couple months out of the reactor the fuel is coolable in air.

And you can vary the assumption to that study and months can become days. But over the time periods we're not worried. It's not a big concern for these time periods. And I think the most powerful testimony of the safety of both pools and casks is Fukushima because those casks were over washed by the tsunami, they were shaken by the earthquake.

The pools were not only over washed by the tsunami and shaken by the earthquake, three of
them were in buildings that were completely decimated by hydrogen explosions.

There's been a lot of rumors spread about what happened in those pools. But if you go on YouTube and look at the video, that fuel is in pretty much the same condition it was before the accident. And it will be there as we safely move it out of the pools as we've done in so many pools before.

Now, I want to go back and close --

MR. SACHS: Okay.

FACILITATOR CAMERON: Gary, Gary, please. Come on, let's let him talk.

MR. MCCULLUM: -- with something that

Councilman Giunta said --

FACILITATOR CAMERON: Seriously.

MR. MCCULLUM: -- at the very beginning of this meeting and that is the importance of safe, reliable, clean electricity, affordable electricity to his community. Business is coming back into his community because they have confidence in our infrastructure.

And what gives us that is a good mix of energy, including nuclear along with all the renewables. And it's great that natural gas is cheap. But what causes us to lose that, what causes
us to fall behind France and maybe even some
countries that are further behind is if we start
devoting resources to things that aren't significant
to reducing risk.

So I'm glad we're having this
discussion. And I thank the NRC for allowing me to
be a part of it.

FACILITATOR CAMERON: Okay. Thank you very much. Thank you, Rod.

We're next going to hear from Debbie Grinnell. Debbie and Chris, are they still here? Are they? Okay.

Let's go to -- while we're waiting to see if they come back in -- let's go to Samuel Brinton, Daniel Curtis, and Mihai -- he's going to tell us. Okay. Alright.

MR. BRINTON: Good evening, ladies and gentlemen. My name is Samuel Brinton. I'm a graduate student in nuclear science and engineering as well as the technology policy program there at MIT.

My research concentrates on the analysis of nuclear waste systems in the context of environmental, economic, and proliferation concerns. I'm the son of a Three-Mile Island survivor. And
when I told my mom that I wanted to become a nuclear
engineer she asked me if she had dropped me too many
times on my head.

And I said no. But some of us have to
go and try to solve these big problems. So I'm going
to try to solve some of these big problems and I hope
we can do that together.

As a student studying nuclear waste it's
really exciting to be in a room like this to hear the
concerns of my fellow citizens and to hope that
someday students like myself and those who you're
going to hear after me can help to address some of
them.

I want to, as we learned at MIT, address
the problem statement. The Commissioners asked us to
address a series of issues and I want to address
issue number one.

Should a timeline for repository
availability be removed from the rule text?

I.E., I'm going to concentrate on the
timeline for geological repository since this is what
I study.

There are a variety of policy
implications on this repository’s construction, but
it is evident that a timeline, though complicated, is
actually achievable.

My recent lecture on the history of nuclear waste there at MIT was met with some challenges because of its title. I called it the search for Tartarus. I.E., it could be called the search for hell.

Some may recognize that nuclear waste repository may be a very difficult place to site. But I recognized it as a place that is absolutely fineable if you have Godly intentions.

In 1957 the National Academies of Science established that a geological repository was the preferred system for the permanent storage of nuclear waste.

Now, I wasn't around in 1957 nor was I around in 1970 when we tried to site the very first geological repository. I was raised on farms in Kansas and I am proud to say that the very first repository was tried to be sited in my home state there in Lions, Kansas.

This did not work out well. There were technical challenges. And I've studied how horribly the government mangled its issues trying to site a repository in Lions, Kansas. And I can see a lot of shaking heads. I recognize that challenge.
We didn't do it right. But we can do it right in the future. In 1982 the National Nuclear Waste Policy Act began the site characterizations of a variety of geological formations. And during 1987, the year I was born, a political maneuvering destroyed that process.

Geological repositories exist. In 1979 when my mother was evacuated from the school next to Three-Mile Island the Congress also authorized the Waste Isolation Pilot Project.

We have to recognize that these geological repositories exist and that they are also being constructed. This is applicable because the permanent solution is feasible.

Let students like myself have the time to study these challenges. And with enough political action it will be able to move forward. And I will make my last statement right now.

FACILITATOR CAMERON: Thank you.

MR. BRINTON: Thank you so much. Long-term storage is available and students like myself are ready to take the technical capabilities of geological repositories as the next challenge.

Thank you for your time.

FACILITATOR CAMERON: Okay. Thank you.
Thank you very much, Samuel. Thank you.

And Daniel, Daniel Curtis and then we're going to go to Mahai Diaconeasa.

MR. CURTIS: All right. Good evening, everybody. My name is Daniel Curtis. I am a Ph.D. student at the Department of Nuclear Science and Engineering at MIT.

I want to thank everybody for sticking with it. It's getting late. I know we're all getting tired. I want to thank the NRC staff. They've got a thankless job here sitting in the middle often unappreciated by both sides as it is so.

PARTICIPANT: - Federal government's got no shame, young man.

MR. CURTIS: Right. No. I want to thank them very much for their efforts. They're doing hard work.

Alright. My own personal comments on the issue tonight are short and simple. I support the updates that are proposed by the NRC. I believe that they are technically sound. That they represent an appropriate interpretation of the professional consensus of the nuclear engineering community.

There's a lot of sources we could point to on this. I'd point you to the American Physical
Society, the nuclear energy study group had a paper in 2007 that determined independently, unequivocally that with an appropriate schedule of monitoring and inspection, dry storage can be provided for as long as it's needed.

Now, we heard a lot about various frustrations and concerns about the length of time here. I can tell you people of my generation are also frustrated. This is a problem that is not yet solved. But it is one we're eager to solve. We're eager to make sure that these dry storage systems are reliable for as long as they're needed and we are eager to solve the geological waste disposal problem.

I think that's all I've got. Thank you guys very much.

FACILITATOR CAMERON: Thank you, Daniel.

And this is Mihai.

MR. DIACOMEASA: Hello, everyone. I am Mihai Diaconeasa originally from Romania. I was born just a few months after the Chernobyl accident a few hundred kilometers away from it.

Well, that did not impact my career path and now I'm a graduate student at the MIT nuclear science and engineering department with a background in science, like physics, chemistry, mathematics, and
applications in material science.

So I am aware of the renewables and alternative energy. However, I focused my attention on the PRA, like the probabilistic risk assessment, and more exactly on the human reliability assessment part. Because if you look back on the history and you look at all the accidental incidents at the nuclear power plants, most of them came from the human errors.

And humans are made to fail. We cannot avoid that. So it's better to design fail-safe reactors. And I think the industry is doing a great job nowadays and we need to continue on that path.

To the point I can state that the NRC has a good approach into the rulemaking and the technical basis is sound and reasonable.

However, I have a very first and specific concern that I would like to consider -- that I would like the NRC to consider. Specifically it is on the public confidence about reclamation of orphan sites.

Measures must be taken to seek the input from the local residents around an extended storage site on the fairness of continued storage at that site after the decommissioning of the reactor.
As the NRC knows, there are multiple sites across the country at which a reactor has been decommissioned already and the dry cask storage remains as the only remnant of this important energy production.

The public in those communities have received significant financial benefits during the operation of the reactor which are no longer available. The lost economic activity in those communities should be considered in determining appropriate use for the land of the decommissioned reactor site including land that might be used for containing storage.

If a community would feel burdened by containing storage under the principles of consent-based siting, that should also be considered.

Thank you very much.

FACILITATOR CAMERON: Okay. Thank you. Thank you, Mihai. Thank you.

Okay. Is Margo, Margo? This is Margo Roman and then we're going to go to Sheila Parks, Cornelia Sullivan, Birgit Johanson, and Sara Altherr. And then we have four more.

MS. ROMAN: Hi. My name is Margo Roman. I happen to be a veterinarian very concerned about
health and wanted to make just a few comments. I had nothing really formally prepared.

In going to some of these meetings I'm always looking at people with a lot of confidence in looking at the science behind what they're doing. And about in 1999 I went to Washington at a WAN conference with Helen Caldicott. And at the conference we were trying to make people aware about the possibility of what might happen to the grid during the change over to 2000, the Y2K issue.

And we addressed several issues. And one of them was Helen, you know, asked us to go back to our nuclear power plants, which in my case was Plymouth, and find out what they would do if there was a loss of electricity and how we were prepared to have generators backup.

The other thing that she asked me to ask the nuclear power plant was what would we do if we had a terrorist attack. And she gave us two options to ask the nuclear power plant.

What would you do if you had, you know, a terrorist attack that attacked you by plane filled with fuel?

So this is 1999. So I talked to nuclear power plant at Plymouth and I said, I asked them what
they were going to do as a backup and they did have a backup plan. But they didn't have another backup one in case that one didn't work.

And then I asked them what are you going to do about a terrorist attack?

Well, we have a barbed wire fence and three guards.

And so the next question was what are you going to do if a plane filled with fuel leaves Logan Airport and goes right directly into nuclear power plant, what would you do?

And you know what the response was, "Listen, lady, things like that don't happen so just don't worry about it. It's not an issue. Don't spend your time thinking about that."

So all of us -- I want to tell you that planes do not go into any buildings. Planes don't do those things. We know better. The nuclear power plant was so sure, don't worry about it, don't worry about it.

So I want to just make one other comment about the Santa Fe Institute. Does anyone here know the Santa Fe Institute? It's a think tank in Santa Fe, New Mexico. A group of scientists come together and discuss topics.
And all of these students here that are studying at MIT, I've been at Harvard, I've been at Tufts, I've been at all these universities, okay, and I want to tell you how smart I am, okay.

So the Santa Fe Institute brought together scientists from all over, all specialties around the nuclear physicists, the electrical, you know, engineers, the botanists, the M.D.s, they took all the medical specialties, you know, physical specialties, brought them all together, sat them in one room and said, "Listen, guys, we want you to think of -- I want you to figure out what percentage of information you know, you know, you know, you know, you know, you know, you know, you know, you know. That you are so certain that you can tell somebody 100 percent that there is nothing else that could ever happen."

And you know what this group knew? 4 percent. So if I studied for 38 years as a doctor, have gone to seminars and learned everything that I want to try, I'm constantly in continuing education, taught at Tufts for eight years, how much information do I know? Maybe .10001 percent. And I know this much.

So for those brilliant students at MIT,
you know this much. And the confidence that we have
to say that nothing could happen like Fukushima or
Chernobyl or Three-Mile Island is so -- it's so
arrogant on the part of this group to think that we
have to be so -- we know everything. We know the
engineering, we know -- they know this much, guys.
This much.

And in parting, as a veterinarian, 46
percent of dogs are getting cancer. 39 percent of
cats are getting cancer. They are canaries in our
coal mine. Let's look at that picture, guys, and
look at what's happening with these animals. They
are telling us what's wrong with us.

And all of us that know everything, I,
as a veterinarian graduating vet school I knew
everything, I know nothing, okay. Thank you.

FACILITATOR CAMERON: Okay. Thank you.

Thank you, Margo.

All right. This is Susan?

DR. PARKS: Sheila, Dr. Sheila Parks.

FACILITATOR CAMERON: Oh, okay.

DR. PARKS: My name is Karen Silkwood
and so is the name of everybody else in this room who
spoke against nuclear power tonight.

And just remember what they did to her.
They being the NRC, our U.S.A. government, and everybody who owns the nuclear power plants.

I'm also for the dry casks, let me make that very clear. And when I was reading one of those endless reports I came across a statement that said the owners of the nuclear power plants are suing the government, that means us, our money, for $21 billion because the government hasn't made good yet on how to -- what to do with this nuclear power waste, the spent fuel. $21 billion!

So for me who -- I spent a lot of years working against nuclear weapons and now I'm back here on nuclear power, all nuclear power plants are crimes against humanity. Crimes against the flowers, the birds, the trees, the animals. Crimes against our planet Earth.

And I have a solution. I just want to add one thing before my solution. And one of the other things about the repository, it's a nice word for putting this poison that's going to murder gazillions of people, they call it no nukes. We call it the dump if they were going to put all this stuff in the Great Lakes that would have affected the water of 42 billion people, ho-hum.

So my solution is because nobody wants
these spent fuel rods or this nuclear power waste any
place, but I want it at the White House buried there.
I want it buried in the homes of every Congress
person who doesn't stand up and say no more nuclear
power plants. I want it in the backyards of every
single person on the Nuclear Regulatory Commission.

And I want every one of the people that
I've just named to face a Nuremberg-like trial
because that's what you are doing. You are murdering
many more people than the Nazis ever did.

And let me address the legal counsel and
the Supreme Court. The Supreme Court of the United
States also said that slavery was legal lest you
forget and every single solitary thing that the
Nazi's did in Germany was legal. And that's what
this United States government is doing now, killing
all of us with these legal weapons of mass
destruction.

So I hope that all of you on the Nuclear
Regulatory Commission take what I'm saying very
personally because I mean it personally. Because you
can resign. You can get a better job. You can be a
whistleblower. You can be on the side of the angels
and you can look in the mirror again.

What do you tell your children and what
do you tell your grandchildren? You know, this planet isn't going to be safe for hundreds of thousands of years. Thank you.

FACILITATOR CAMERON: Okay. Thank you. Thank you very much. And is Cornelia still here? How about Birgit, Bridget? And it is Birgit? Okay.

MS. JOHANSON: Okay. My name is Birgit Johanson. I live in Jaffrey, New Hampshire. And I'm a member of New England Coalition. And I'm also on the board but I'm not addressing you on behalf of the coalition tonight. These are my personal comments.

I've been involved in this issue really not by choice approximately 30 years now. I was a kid when I started. And there was a plan to site a high-level nuclear waste dump here in the northeast, the Eastern repository.

And looking over some of the documents tonight I realized some of the terminology hasn't changed at all. That's interesting.

So it's eating up a huge part of my life. There are things I would rather been doing and still today there are things I would rather be doing.

PARTICIPANT: Watching the Red Sox?

MS. JOHANSON: No, actually. So I want to start because there's this assumption out there
and it's stated repeatedly that the spent fuel is safe, that it's managed safely, that it's current condition is safe, that the fuel pools are safe, that the reactors are safe.

And I would really like the NRC to acknowledge that the current storage of spent fuel pools is not safe. There isn't anything about it that's safe. They're over stacked, they're beyond the design life, beyond the intentions.

It can be made safer. I can agree with that. But the assertion that doing nothing but maintaining the status quo is safe is completely untrue and needs to change. So step one is to acknowledge that the spent fuel in the fuel pools is not safe.

Second, NRC's rulemaking process is vague. And I say this because it's like very, you know, complex terminology that the average person can't understand. That experts and lawyers spend a very long time researching and pouring over. And it's contradictory.

It's kind of obtuse. It's like almost like church or something. Not in a bad way. I don't intend to insult any church. But if you make comments or criticisms, technical arguments, you
point out design flaws, you point out things like the underground pipes at Vermont Yankee that weren't disclosed, your comments disappear into the rulemaking process. And it could be years before NRC turns around with a real solution.

Site specific arguments and move to rulemaking and address basically after years of study. So nothing is done quickly.

Some of the terms that I've come across in what I was reading tonight because I didn't have time to go over the 575 pages, although I fully intended to and will. These ideas of generic and efficiency are their ways to find words to describe a process that has basically become unmanageable.

You are in charge of regulating a fleet of aging reactors that is crumbling as we speak and it's exposed to a multitude of threats from weather and accidents, power outages, terrorism, and just old age, decay, bad design. So, the process is unmanageable.

And I think the NRC's job has become unmanageable. So it's not -- I don't, you know, so much have criticisms of individual there unless they're so on the side of industry that they can't make a rational decision on behalf of public safety,
but you are as much trapped in the bureaucracy as anyone else. This started mostly before you were born.

FACILITATOR CAMERON: Can I ask you to finish up?

MS. JOHANSON: I'm finishing, yes.

FACILITATOR CAMERON: Thank you.

MS. JOHANSON: So it's impossible to ignore site-specific criteria and move them over to rulemaking and still protect public safety.

So on any given day in the normal day in the life of the NRC there's no transparency and no real opportunity for the public to have any meaningful input into how the reactors are run, how they operate, and certainly no real opportunity input into the best available methods for managing the spent fuel.

And because of the sort of the nature of the dialogue itself the way the rulemaking is set up, you're only allowed to address certain specific issues. Anything that falls outside of the question being asked is not considered.

So the nature of the dialogue itself limits inquiry and intelligent discussion.

To close, rulemaking that's vague and
has, I guess, many holes in it --

FACILITATOR CAMERON: Could you finish up for us, miss?

MS. JOHANSON: Yes. I am finishing up.

It's more of an obstacle to real solution than a help. The guidelines are in principle founded upon assumptions formed in the 1950s and before in the wartime era. To continue to build on such an outdated foundation is a hazard. To stay in rigid compliance with its own rules NRC has, in effect, bound its own hands and put the public at enormous risk.

I support redesigning the entire legal basis for the NRC's regulatory enforcement. Closing aging reactors, moving all spent fuel to hardened storage that can withstand climate change, power outages, accidents, and terrorism. We should be designing for the worst possible scenarios, not deliberately minimizing the risks.

FACILITATOR CAMERON: Thank you. Thank you, Birgit.

And Mr. Fleischer, is he still here?

This is Robert Fleischer, I believe.

MR. FLEISCHER: That's right.

FACILITATOR CAMERON: Okay.

MR. FLEISCHER: I'm on the Board of
Health of the neighboring town of Groton. And I'm not speaking as a member of the board -- of any board of health, but as a private individual.

But in my experience on the board, for example, a neighbor down the street from me had an unfortunate accident. He had -- he was running his truck on vegetable oil and he had a fire and a lot of the vegetable oil spilled. And we made him clean it up. Not just clean up the vegetable oil, but remove the soil.

Vegetable oil. In other words, we considered the protection of clean water so important that vegetable oil was considered a threat, because it is if it gets into the aquifer.

I don't see that same level of concern about the essentials of life in our nuclear regulation. And I think regulation is very important. And I don't see regulation, for example, as antithetical or the enemy of market forces.

And, in fact, you need good regulations. Regulations that state what you insist must happen for market forces to then work.

In other words, if you simply regulate to the level of safety that the industry is willing to offer you, then market forces aren't working in
that area. They're not working to find a safe solution. You're simply going to get what they offer.

Now, if you really rely on market forces after -- and you really regulate for real safety, the safety you want, the protection of the environment that you want, you might find that the market forces do more than you expect.

They might push you to a new technology. They might tell you one industry goes down. One thing I don't understand is why this entire industry which was predicated on finding permanent storage, safe, permanent storage wasn't shut down when that didn't happen.

And I see that as a fundamental failure of regulation. And a failure that allowed market forces to just produce poison and it really worries me. Thank you.

FACILITATOR CAMERON: Thank you. Thank you very much, Robert. And Cornelia, please? And this is Cornelia Sullivan joining us. And next we're going to go to Ben Chichester and we have one other.

MS. SULLIVAN: Good evening. My name is Cornelia Sullivan. I'm a member of PAX Christie Boston Chapter.
This is my own personal statement. I do not represent -- there wasn't time to clear this with any other people, so this is my personal position.

No nuclear plant is safe. We had a major problem at mile -- Three-Mile Island. Russia had a major disaster at Chernobyl. Now Japan with G.E. Technology has a two and a half year old lethal nuclear problem. They do not have -- which they do not have technical or financial resources to deal with.

We have no time to waste if we want human, animal, and plant life to survive. Please decommission all nuclear plants. Finance the best scientists and engineers to explore safe ways to do this. Finance the best people to research and develop renewable energy, solar and wind.

I believe the U.S. should follow Germany's example in how to move forward in this direction. Thank you very much.

FACILITATOR CAMERON: Okay. Thank you, Cornelia. Is Ben Chichester here? This is Ben. And how about Paul Haugsjaa? No? Okay.

MR. CHICHESTER: Good evening. My name's Ben Chichester. I am affiliated with the people who realize that a simple and spiritual life
is the only life that can survive on the planet Earth.

The Waste Confidence is a sham. Everybody knows it's a continuation of the sham that began with the Atomic Energy Commission back in the 50s which told us that they were going to care for the wastes from cradle to grave.

And now here we are today, everybody's got their hands on their head saying what are we going to do with this waste? And there is not one ounce of the waste that has been permanently disposed since it has been produced in secret outside of any democratic process by corporations in this country who are still designing and exporting this dangerous technology.

And three of them are burning holes to China as we speak, out of control. And you're here today to ask us to have confidence, which was a ploy so that you continue the juggling act that you've been doing for all these years with the nuclear waste.

It is a ploy and it has to stop because the people are onto it. This nuclear mafia that has been running the nuclear bomb industry around the country, around the world operates outside of the
democratic process and the people want that to stop.

This nuclear waste has been called a resource by people in my hometown who build nuclear submarines where the nuclear waste is being stored and building up at the military installations across this country as well. And they want to call it a -- it's a resource that can be somebody wants to buy that stuff. Well, good luck.

But everybody knows that if you have a fancy coat and you shake enough hands, you can sell anything, even nuclear waste.

So you come up with the nifty phrases like interim storage and permanent disposal and below regulatory concern. All these clever phrases to mask what is really a crime against humanity to produce waste that will last for thousands of years to pass on to future generations. It's wrong. And it should be stopped. Stop the charade.

Who profits? I'm here to suggest that we need site-specific solutions. Nothing generic.

FACILITATOR CAMERON: And, Ben, could you wrap up for us, please?

MR. CHICESTER: I also want to say that I was moved and I appreciated Gregory Jaczko, the former Chairman of the NRC said pretty much what
amounts to a death bed conversion although he didn't
die, but he saw other people dying. And he came out
and said that these plants are inherently unsafe.

    And I am sure that he would say that
much that we know about long-term storage is their
solutions are unsafe. And we can't go forward
pretending that we have solutions in order to just
let the clock run out for these companies. Thank
you.

    FACILITATOR CAMERON: Thank you. Thank
you, Ben.

    And, Pam, Pam Boyes?

    MS. BOYES: Hi. My name's Pam Boyes. I
fortunately don't have the experience of living near
a facility nor am I well-educated about nuclear
plants. But I do know a bit about history.

    And remember history class, empires, the
rise and they fall? Languages, dead languages,
Latin, Greek, no one speaks them anymore. The
language of the Egyptians no one knew what -- how to
read it until, you know, one of Napoleon's soldiers
found the Rosetta Stone.

    The secrets of old cultures are known to
us. The new stones at Turkey, Gobekli Tepe, there's
mass standing stones and they date from 1100 years
ago. It's a whole culture and it's unknown to us and it's only 1100 years old.

   Nuclear waste is going to be around a lot longer, okay. Now, the -- going back to the proposed short-term storage, 60 years. What was life like 60 years ago?

   Okay. When we built things 60 years ago what were they like? What will things be like 60 years from now?

   Okay. How about 120 years ago? That was 1893. The technology between 1893 and today is significant. Going forward that's 2133. Those are leap years. That's talking about a big difference.

   So when you think about 60 years, 120 years in our country's social history 60 years we saw a lot of social and political change. 120 years, the same thing.

   A lot of countries, a lot of peoples no longer exist. Look at old stamp albums, there are countries that no longer are. Those years mean a lot. Our country is an empire. It might no longer be.

   So how safe is 60 years? Will our empire be around in 120? Well, it hasn't been around for a long time. And so I'm not really sure that I'm
good with indefinite storage. I know that there's a lot that's not safe.

We don't inherit the wisdom from other empires. We lose it, okay. The Egyptians didn't inherit the wisdom from their previous cultures, the Greeks didn't pass it on, the marvelous interconnection from the -- of the Roman Empire fell apart, the wonderful wonders of the Byzantine Empire fell apart with the bite of a flea.

Climate will be a part of the remaking of our empire. But the nuclear waste, wherever it is, is going to be burning away.

FACILITATOR CAMERON: Could you wrap up for us, please?

MS. BOYES: Okay. The buildings it is in will decay. The warnings around it will be unintelligible, okay. There's no way to make sure it is permanently safe, okay. We need to take a lot of steps back and really think about the safest way to do this.

Thank you.

FACILITATOR CAMERON: Thank you. Thank you, Pam. I would just thank all of you for your comments and your patience tonight. And I'm going to ask Keith McConnell, the director, to close the
meeting out for us.

MR. MCCONNELL: Yes. I'd just like to reiterate what Chip just said, which is we do thank you for your effort. We do also appreciate the passion behind the comments. And also we do also appreciate the effort that it takes to come to these meetings.

So thank you for your comments and we'll call the meeting closed. Good night.

(Whereupon, the above-entitled proceeding was concluded at 10:29 p.m.)