

ATTACHMENT 2

Official Transcript of Proceedings
Nuclear Regulatory Commission

Draft Generic Environmental Impact Statement
on Decommissioning - Public Meeting

Docket Number:(not applicable)

Location: Chicago, Illinois

Date: Thursday, December 6, 2001

Official Transcript of Proceedings

NUCLEAR REGULATORY COMMISSION

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1 UNITED STATES OF AMERICA

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3 NUCLEAR REGULATORY COMMISSION

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5 DRAFT GENERIC ENVIRONMENTAL

6 IMPACT STATEMENT ON DECOMMISSIONING

7 + + + + +

8 THURSDAY

9 DECEMBER 6, 2001

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11 CHICAGO, ILLINOIS

12 + + + + +

13 The EIS Decommissioning Meeting met at the
14 Drake Hotel, 140 East Walton, Chicago, Illinois at
15 7:00 p.m., Chip Cameron, presiding.

16 PRESENT:

17 CHIP CAMERON

18 NRC Special Counsel for Public Liaison

19
20 ALSO PRESENT:

21 Dino Scaletti NRC

22 Debbie Musiker Lake Michigan Federation

23 Michael Masnik NRC

24 Eva Eckert Hickey PNNL

25 Paul Gaynor ELPC

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1 ALSO PRESENT: (CONT.)

2 Michael Klebe IDNS

3 Lynne Goodman Detroit Edison's Fermi I

4 Barry Zalcman NRC

5 Steve Lewis NRC

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I-N-D-E-X

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

(7:02 P.M.)

MR. CAMERON: Good evening, and I'd like to welcome all of you to the Nuclear Regulatory Commission's public meeting on a draft generic environmental impact statement on reactor decommissioning.

My name is Chip Cameron and I'm the Special Counsel for Public Liaison within the Office of General Counsel at the Nuclear Regulatory Commission which we'll be referring to by the acronym NRC tonight. And it's my pleasure to serve as your facilitator for tonight's meeting.

And I just want to briefly cover three things about the meeting process tonight before we get into the substance of tonight's discussion. First of all, I'd like to talk about the objectives of the meeting. Secondly, the format and ground rules for the meeting. And third, I'd like to just give you a brief overview of the agenda so you know what to expect tonight.

In terms of objectives, one objective is for the NRC to explain the findings and evaluation that is in the draft generic environmental impact statement, including how that environmental impact

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1 statement might be used in the NRC's regulatory
2 program. And I should note at this point that this
3 is, this generic environmental impact statement is
4 first of all a draft, but second of all, it's called
5 a supplement, supplemental generic environmental
6 impact statement.

7 The NRC originally, in 1988, did a generic
8 environmental impact statement on decommissioning and
9 it covered a lot of different types of facilities.
10 More facilities than just nuclear power plants.

11 This supplement, this draft supplement
12 that we're going to be talking about tonight is an
13 update, a supplement to the original 1988 document.
14 But it only addresses nuclear power plants and not the
15 other types of facilities that the NRC regulates. And
16 if you have questions about that, there will be a time
17 to test the staff about that. As I said, it is a
18 draft and it won't be finalized until the NRC
19 evaluates all of the comments that come in on this
20 draft, including the comments that we hear from you
21 tonight.

22 And the second objective, the most
23 important objective tonight is to listen to your
24 concerns and comments on this particular issue. The
25 NRC is accepting written comments on the draft GEIS,

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1 but we're here tonight to talk to you in person. You
2 may find some information that's presented tonight by
3 the staff or that you hear from other people in the
4 audience. You may find that helpful in preparing
5 written comments, but I just want you to know that any
6 comments presented during tonight's meeting will carry
7 the same weight as any written comments that we
8 receive.

9 The second item I wanted to talk about was
10 format and ground rules. And format for the meeting
11 flows from the objectives of the meeting. First of
12 all, we're going to have two brief presentations by
13 the NRC and by our expert consultant from the Pacific
14 Northwest National Lab to give you some context on the
15 document, the draft GEIS. And after each of those
16 presentations, we'll go out to you for question and
17 answer to make sure that everything is clear.

18 That's the first segment of the meeting.
19 And the second segment is going to allow anybody who
20 wishes to make a more formal comment to do so. And
21 when we get to that point, you can come up here. I
22 can bring you this talking stick and you can stand in
23 the audience or you could use the stand up mike. Now,
24 we do have sign up cards for people who want to speak,
25 and basically, this is to give us an idea of how many

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1 people want to talk. So, if you haven't signed up and
2 you're sort of seized by the moment as we're going on
3 tonight and you want to make a formal comment, you'll
4 be able to do so.

5 In terms of ground rules, I want to make
6 sure everybody gets a chance to speak. And I would
7 just ask you to try to be as concise as possible. I
8 don't think we do have to worry about time limitations
9 tonight. But if you could, just as a guideline, keep
10 your comments between the five and ten-minute range,
11 we would appreciate that. Second ground rule is, I
12 would ask that only one person speak at a time. Most
13 importantly, so that we can give whomever has the
14 floor our full attention, but also so that we can get
15 a clean transcript.

16 We have a court reporter tonight, Stuart
17 Karoubas right over here who is going to be taking a
18 transcript of the meeting and that will serve as our
19 record of your comments and questions. And that
20 document will be available on the NRC's web site. Is
21 that correct, Dino? Okay. And if you want a hard
22 copy of the transcript, we will be glad to send you
23 one also.

24 Okay. In terms of the agenda, we're going
25 to go first to Dino Scaletti, who is going to give you

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1 an overview of the EIS process. And Dino is right
2 over here, he is within NRC's Office of Nuclear
3 Reactor Regulation. He's been with the NRC for 27
4 years as an environmental project manager. And
5 indeed, he is the project manager for the preparation
6 and development of this generic environmental impact
7 statement. His prior experience was with the US Navy
8 in their land-based nuclear program. And he has a
9 graduate degree in zoology and a Bachelor's in
10 electrical engineering.

11 Dino will do his presentation with
12 questions and answers, then we're going to go to Eva
13 Eckert Hickey who is right here. And Eva is the
14 project manager for the preparation of this
15 environmental impact statement from the perspective of
16 the National Lab, Pacific Northwest National Lab whose
17 team of experts are helping us to prepare this
18 environmental impact statement. And Eva, you may want
19 to introduce Mike as part of your team. And I know
20 you're going to be talking about that later on.

21 Now, Eva is a health physicist, not only
22 environmental health physics but she also has
23 experience in emergency preparedness and operational
24 health physics. And at one time, she worked as an
25 environmental engineer for the Nuclear Regulatory

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1 Commission. And her educational background is she has
2 a Master's degree in health physics from the Georgia
3 Institute of Technology.

4 I would just thank you all for being here
5 tonight. And one thing that I would say is that in
6 addition to your comments, we have NRC staff here from
7 different offices including our Office of General
8 Counsel. We have staff here from our regional office,
9 NRC Region 3. Please take the opportunity to talk to
10 them. I know you probably have already done that, but
11 talk to them after the meeting. And try to, we would
12 like to maintain some continuity with people, so we
13 will give you our phone numbers, emails. If you need
14 any information from the NRC, please contact us.

15 And the final thing that I'll say is the
16 NRC has a meeting evaluation form that is available in
17 the back. And this helps us to determine how we can
18 improve our public meetings. And if you could, if you
19 could give us some remarks, you don't have to do it
20 tonight because it is already franked and you can mail
21 that in. And what I'd like to do now is I'd like to
22 ask Dino Scaletti to give us an overview of the
23 environmental impact statement process. Dino?

24 MR. SCALETTI: Thank you, Chip. Good
25 evening. I also would like to thank you all for

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1 attending tonight. Let me take a few minutes to
2 explain to you and give you an overview of why we're
3 here tonight.

4 Well, first, I'd like to tell you that the
5 US Nuclear Regulatory Commission was formed as a
6 result of the Atomic Energy Act of 1954 and the Energy
7 Reorganization Act of 1974. The NRC's mission is to
8 regulate the nation's use of, civilian use of nuclear
9 materials to ensure protection of the health and
10 safety of the public and workers and to protect the
11 environment. It is an independent agency. It's made
12 up of five commissioners chosen by the President, and
13 the chairman is designated by the President.

14 The purpose of this meeting is to discuss
15 Draft Supplement 1 of the generic environmental impact
16 statement or GEIS on the decommissioning of nuclear
17 facilities. In 1988, the NRC published NUREG-0586, an
18 environmental impact statement that evaluated the
19 impact for decommissioning of a whole variety of
20 facilities including power reactors or power plants,
21 excuse me. We will explain what the GEIS is, how it
22 is used, when it is used.

23 First, I want to describe the process set
24 forth in the National Environmental Policy Act or NEPA
25 for developing this GEIS. And then I will turn the

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1 discussion over to Eva Hickey and she will tell you
2 the approach for developing the document including
3 defining the scope, establishing a process for the
4 environmental analysis, the format of the report, and
5 finally, the conclusions of the report. We plan to
6 keep our presentation short tonight in order that you
7 the public have time to ask questions and make
8 presentations.

9 The National Environmental Policy Act of
10 1969 places the responsibility on federal agencies to
11 consider significant aspects of the environmental
12 impact of a proposed action. It requires that all
13 federal agencies use a systematic approach to consider
14 environmental impacts during their decision making.
15 The NEPA process also is structured to ensure that
16 federal agencies will inform the public that it has
17 indeed considered environmental concerns in its
18 decision making process and invite public comment and
19 invite public participation to evaluate the process.
20 This meeting is part of that process.

21 NEPA requires that an environmental impact
22 statement or assessment be prepared for all major
23 federal actions. Also, supplements to drafts or final
24 EIS's are required when there are significant new
25 circumstances or information relevant to the

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1 environmental concerns. The original GEIS was
2 published in 1988 over 13 years ago. Since then, we
3 have had several revisions to our regulations and
4 gained considerable additional experience from actual
5 decommissioning. The staff felt that it was an
6 appropriate time to revise the original GEIS on
7 decommissioning plants.

8 Generic EIS's are allowed in cases where
9 there is a need to address generic impacts that are
10 common to a number of similar proposed actions or
11 similar facilities. This process provides for the
12 preparation of generic environmental impact statements
13 to avoid the time and expense of repeated reviews of
14 essentially the same material. When an environmental
15 issue has been resolved generically, there is no need
16 to conduct another detailed review of that same issue
17 unless there is significant new information related to
18 some aspect of that issue.

19 The NEPA process follows certain steps
20 that the NRC is required to follow. And the NRC is
21 required to follow this process which provides
22 consistency for all EIS's prepared by federal
23 agencies. The first step in the process is a notice
24 of intent which was published in the Federal Register
25 in March 2000. The notice of intent informed the

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1 public that an EIS, or in this case, a supplement to
2 NUREG-0586 was going to be published. A second notice
3 was published in May 2000.

4 Four public scoping meetings were held in
5 2000 in San Francisco, Chicago, Boston, and Atlanta.
6 The scoping meetings are used earlier than NEPA
7 process to help the federal agencies decide what
8 issues should be discussed in the EIS. The scoping
9 meetings help us to find the proposed action and
10 determine any peripheral issues that might be
11 associated with the proposed action. The public
12 comments on the scope of the supplement were accepted
13 through mid-2000.

14 Once scoping was completed, NRC collected
15 data and evaluated the environmental impact associated
16 with reactor decommissioning. The environmental
17 evaluation addressed the impacts of the proposed
18 action in a generic manner; that is, impacts that may
19 occur at all or most decommissioning nuclear plants.
20 The alternatives to the proposed action and the
21 impacts that could result from those alternatives are
22 addressed. Finally, we looked at mitigating measures,
23 those measures that can be taken to decrease the
24 environmental impact of the proposed action.

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1 After the environmental impact evaluation
2 was completed, a draft supplement to the environmental
3 impact statement was published for public comment on
4 November 9, 2001. All federal agencies issued this
5 draft for public comment. The public meeting process
6 we are in now is to gather your comments on that
7 supplement. After we gather the comments and evaluate
8 them, we may change portions of the supplement based
9 on those comments. The final EIS is scheduled to be
10 issued in mid-2002.

11 What exactly is the supplement to the
12 generic environmental impact statement for
13 decommissioning? A generic environmental impact
14 statement identifies the environmental impacts that
15 may be considered generic for all nuclear reactor
16 facilities. It defines an envelope of impacts
17 predicting the level of impacts for a specific set of
18 generic conditions. It also identifies the
19 environmental impacts that need to be considered in
20 more detail as site-specific issues for each facility.
21 Supplement 1 provides updated information on
22 environmental impacts from decommissioning activities
23 for permanently shutting down nuclear power plants.

24 The original NUREG-0586 was published in
25 1988. Therefore, it's over 13 years old. Since the

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1 original document was published, we have had new
2 regulations related to decommissioning that were
3 issued. For example, the regulation requiring the
4 submittal of a post-shutdown decommissioning
5 activities report and a license termination plan. In
6 addition, since 1988, there has been an increase in
7 the amount of decommissioning experience in the US.
8 Currently, 21 US nuclear power plants have permanently
9 ceased operation. As a result, there is over 300
10 years worth of decommissioning experience resulting in
11 much new information available regarding the
12 environmental impacts for decommissioning a commercial
13 nuclear power plant.

14 And finally, there have been several new
15 issues that were not considered in the 1988 GEIS.
16 These include "rubblization" which in this case
17 entails completing the decontamination and disposing
18 of the slightly contaminated building rubble on site
19 in such a way as to meet the site release criteria.

20 Another issue is partial site release
21 which involved releasing the clean part of the site
22 before decommissioning is completed.

23 And finally, entombment which, although
24 was considered in the 1988 GEIS, may need to be
25 reconsidered in a somewhat different form to allow for

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1 the possibility of some substantive decontamination or
2 removal of large components prior to entombment.
3 These new issues are addressed in Supplement 1 to
4 NUREG-0586.

5 Supplement 1 will be used to focus the
6 analysis of the environmental impact. It will help us
7 determine which of the impacts are site-specific and
8 need to be considered individually for each nuclear
9 power plant, that is, decommissioning, and which
10 impacts are generic and can be evaluated as part of
11 the GEIS and then not reevaluated every time a plant
12 enters decommissioning. This allows us to spend more
13 time and resources that are required to focus in on
14 the impacts that are applicable for those particular
15 sites.

16 The supplement does not include a site-
17 specific look at each facility. Some issues like
18 those related to the presence of endangered and
19 threatened species will always be site-specific and
20 will need to be addressed separately from the
21 supplement. One final purpose is to determine if
22 additional rulemaking for decommissioning is required.
23 If so, the supplement may support that rulemaking
24 activity.

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1 Supplement 1 will be used throughout the
2 entire decommissioning process. The NRC regulations
3 require that no decommissioning activity be performed
4 that would result in significant environmental impact
5 that has not previously been reviewed. This means
6 that every time the licensee starts a new activity,
7 they must determine if it would result in an
8 environmental impact that was not reviewed in the
9 supplement or in the site-specific final environmental
10 impact statements or in any subsequent environmental
11 analysis that was reviewed and approved by the NRC.

12 In addition, a hard look is taken at the
13 environmental impacts at the state of the post-
14 shutdown decommissioning activities report when the
15 post-shutdown decommissioning activity report is
16 submitted and at the time the license termination plan
17 is submitted. And that concludes my presentation.

18 MR. CAMERON: Okay. Thank you, Dino.

19 Dino has just talked about the GEIS
20 process and also about how this document might be
21 used. And before we go to Eva who is going to talk
22 about the substance of the document including issues
23 such as scope and methodology, does anybody have any
24 questions on Dino's presentation on process issues at
25 this point before we go on? And if they do come up

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1 during the course of the evening, we can get to them,
2 too.

3 Yes, and just give us your name and
4 affiliation?

5 MS. MUSIKER: Sure. I'm Debbie Musiker
6 with the Lake Michigan Federation. My question
7 concerns the last comment that you just made about
8 that no activities can be performed during
9 decommissioning that would result in significant
10 environmental impacts not previously reviewed. Would
11 you determine this from the submission of the PSDAR?
12 Is that how you would determine if anyone was going to
13 do anything that wasn't previously reviewed?

14 MR. SCALETTI: Well, the licensee has to
15 take a hard look at his decommissioning process as
16 required by 5082. In there, he must look at the
17 activities, look at the environmental impacts that had
18 previously been established and reviewed and determine
19 whether or not the activities are covered by those
20 previously issued environmental impact statements.
21 And we will, we go out following the submission of the
22 PSDAR and do a fairly robust look-see at their records
23 to determine whether or not we agree.

24 MS. MUSIKER: And then, once the work is
25 performed, is there monitoring to make sure they're in

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1 compliance with the PSDAR? If they're actually
2 acting, doing what they said they were going to do?

3 MR. SCALETTI: You wanted to say
4 something, Mike?

5 MR. CAMERON: Mike, do you want to try to
6 elaborate on this for Debbie?

7 MR. MASNIK: Let me go back to your first
8 question, too. I just, I want to make it clear that
9 what happens is, oh, I'm sorry. Mike Masnik.
10 Licensees in decommissioning actually take the plant
11 apart. And our regulations require that if you make
12 any changes to the plant, you have to do certain
13 reviews. And one of those reviews, of course, we look
14 at it, we require the licensees to look at any changes
15 to the facilities from the standpoint of safety
16 because that's a big concern. If they make a change
17 in the plant, will it affect the safe operation in the
18 facility?

19 But in that process, they look at a whole
20 host of other activities. Will it change the fire
21 protection program? Will it change, you know, quality
22 assurance issues? It is one of those things that they
23 look at every time they make a change in the plant,
24 and what they have is a procedure. And that procedure
25 says, is this activity going to result in any impacts

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1 outside the bounds of these particular documents. So,
2 the licensee does that check before the actual change
3 to the facility is made.

4 We, the NRC, receive annually a list of
5 those changes to the facility, and we do inspect that
6 process by which they do this screening as we call it.
7 So, just to amplify that it's done at that point, and
8 then, as Dino said, when the PSDAR is submitted, we
9 typically look behind the licensee's assertion that
10 the plan that is proposed by the PSDAR will not result
11 in any impacts outside the bounds of any previous
12 evaluation. We actually send an inspector out and he
13 looks at the materials that the licensee relied on to
14 come to that conclusion.

15 Now, as far as any monitoring to determine
16 whether or not in fact there was any impact, well,
17 certainly from a radiological point of view, there's
18 a lot of monitoring that goes on and that if they had
19 missed the mark, you know, it would be determined or
20 discovered by them. We don't require, for example,
21 monitoring of aquatic systems, let's say. That's
22 under state control. And what we have found is that
23 typically, there are no offsite impacts associated
24 with decommissioning that would affect, that would

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1 have a non-radiological effect, let's say, on fish or
2 wildlife in the area.

3 That's one of the things that Eva will
4 talk about actually. Does that answer your question?
5 Okay.

6 MR. CAMERON: Okay. And as Mike
7 mentioned, I think in Eva's presentation, she's going
8 to get to some similar issues to that one, Debbie, and
9 we can explore those in more detail. Does anybody
10 else have a question at this point about the process
11 issues before we go on? Okay, good.

12 Eva?

13 MS. HICKEY: Okay. Thank you and welcome.
14 We're glad to have you here tonight. We look forward
15 to hearing your comments on Supplement to NUREG-0586.
16 My name is Eva Hickey and I am the task leader for the
17 Pacific Northwest National Laboratory multi-
18 disciplinary team. We put together, we assisted NRC
19 in the development of Supplement 1. I have with me
20 one of the other people on our team, Mike
21 Sackschewsky, he is our terrestrial ecologist, and he
22 will be here helping me answer questions and listening
23 to your comments also.

24 But before I get into how we developed the
25 supplement, I thought I should go over a couple of

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1 definitions that were very important to us as we
2 started the preparation of this document. And the
3 first one is decommissioning. And this definition is
4 out of the regulations and it is something that we
5 will continue to go back to and discuss as I talk
6 about the supplement. The definition for
7 decommissioning is the process of safely removing a
8 facility from service followed by reducing residual
9 radioactivity to a level that permits termination of
10 the NRC license.

11 A second definition, the term that we've
12 heard quite a bit so far tonight and we'll continue to
13 discuss is generic. And so, I thought it would be
14 important to define that. And in our supplement, we
15 define generic as environmental impacts that have been
16 determined to apply either to all plants or all plants
17 with certain characteristics. Say, all plants that
18 are pressurized water reactors or perhaps all plants
19 that are located on the ocean.

20 In addition to this generic, we also look
21 at the significance of the impact. And I'll talk a
22 little bit more about that, but that significance is
23 defined as small, moderate or large. And finally, in
24 determining whether an impact is generic, we look at
25 the mitigated measures that are taken when determining

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1 if an environmental issue is generic. So, with those
2 definitions, let me talk just a minute about the
3 approach that we used when we first started the
4 process of supplementing NUREG-0586.

5 We've talked a little bit about the fact
6 that the GEIS is over 13 years old and that there's a
7 lot of new information that's available since the time
8 the GEIS was written. We also needed to decide what
9 the scope would be. And we knew that we were only
10 going to look at power reactors and not the other
11 facilities that are addressed in the 1988 GEIS. And
12 we asked ourselves, how are we going to look at the
13 impacts? And so, I'm going to spend a few minutes
14 talking about that, and then, the bottom line, our
15 goal was how do we determine which impacts are generic
16 and which impacts are site-specific.

17 So, for the rest of my presentation, I
18 will be talking about how we determined the scope. I
19 will explain the approach that we used for doing our
20 environmental analysis. I will talk about where we
21 got the information that we used for the environmental
22 analysis and the determination of environmental
23 impacts. And then, I will briefly go over and
24 summarize the findings that are presented in the
25 supplement.

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1 To begin with, let me explain what part of
2 the process of a nuclear reactor facility we're
3 talking about, where we got our information. You can
4 see here that the plant is constructed, it's licensed.
5 Sorry, it's a little difficult to read, but the plant
6 can operate up to 40 years with a 20-year optional
7 relicense. And then the plant would be shutdown and
8 it would start the decommissioning process. So, the
9 decommissioning activities that we are looking at are
10 somewhere between five and 60 years after the plant
11 completes operation.

12 Now, the first thing we needed to do was
13 develop, determine the scope for the supplement. And
14 the scope is based on a number of things. First, we
15 started with the original 1988 GEIS. Then, as Dino
16 talked about, we have the four scoping meetings. And
17 from those scoping meetings, we determined all of the
18 comments, and we then did an evaluation of the
19 comments that we obtained. I guess both from scoping
20 meetings and also any letters that we received, and we
21 did an evaluation of those comments to determine
22 whether they were in scope.

23 And I'd like to spend just a second to
24 explain how we did that. First, we looked at the
25 definition of decommissioning. So, if we received a

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1 comment and it did not really fit what we were looking
2 at within decommissioning, then we would say that
3 comment was out of scope. There were also a number of
4 requests that the Commission made that we needed to
5 look at. And Dino discussed those briefly.

6 We were asked to look at "rubblization",
7 partial site release and entombment. Thank you. And
8 so, any comments related to those issues were
9 considered within scope. And then, one of the ways
10 that we've tried to determine whether something was in
11 scope or not was there's a number of issues that would
12 appear to be related to decommissioning and in fact
13 they are. But they may be outside of the purview of
14 NRC.

15 For example, if a state had a requirement
16 that a nuclear facility once decommissioned go back to
17 a green field state, that's outside of the purview of
18 NRC. So, if we had a comment that might be related to
19 an issue like that, that would have been considered
20 out of scope. And then, there's also a number of
21 other issues that are covered elsewhere in NRC
22 regulations and environmental analyses.

23 An example of this would be the
24 radiological impacts from a reactor after the license
25 has been terminated. Now, those impacts have already

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1 been looked at and evaluated in another generic
2 environmental impact statement on license termination.
3 So, we are not looking at those impacts in the scope
4 of this document.

5 And there's a number of issues in the
6 appendix, there's an appendix that goes into detail
7 about those issues that would appear to be in scope
8 that are actually identified elsewhere. Appendix A of
9 the supplement will give you a list of all of the
10 comments that we received that were considered in
11 scope. If you're interested in looking at all of the
12 comments, there's a scoping summary report.

13 So, that's a little bit about how we came
14 up with our scope. Now, we needed to come up with an
15 approach or a method for developing and identifying
16 the environmental impacts. And what we decided to do
17 was look at all of the activities that take place
18 during decommissioning. And then, we also needed to
19 look at the environmental issues.

20 Let me talk just a minute about the
21 activities. We put together a list from our
22 experience of all the activities that would take place
23 from the time a plant closed down and started
24 decommissioning until it came to license termination.
25 And then, we consulted with the NRC staff, other NRC

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1 staff who have experience in decommissioning, and we
2 talked to the industry and asked them if they had any
3 other suggestions or modifications to our list of
4 activities.

5 And from that, we came up with a pretty
6 extensive list of activities that occur during
7 decommissioning. And a list of those activities can
8 be found in the appendix. And we did the same thing
9 in identifying the environmental issues that we wanted
10 to discuss. We used the usual ones for NEPA and then
11 we also went back and we asked the NRC staff and the
12 industry if they had any other suggestions. And we
13 came up with our list of issues that we were going to
14 evaluate for environmental impacts.

15 So, the next thing we did was we came up
16 with a matrix. We looked at all the decommissioning
17 activities, and for every environmental issue that we
18 had identified, we made an assessment, would there be
19 an environmental impact when that decommissioning
20 activity took place? And so, we filled out our matrix
21 and we came up with a list of environmental impacts
22 from the decommissioning activities. And there is an
23 extensive discussion of that in the appendix also.

24 Now, after we came up with that initial
25 list of environmental impacts from decommissioning

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1 activities, we recognized that there were a number of
2 variables from plant to plant, and that we needed to
3 make sure that we looked at all those variables when
4 we were evaluating the environmental impacts. And
5 some of those variables would be the type and the size
6 of the plant. Some of the plants are very large, over
7 a thousand megawatts. Some of them are quite small,
8 you have pressurized water reactors, boiler water
9 reactors and a couple of other types of plants.

10 And we also looked at the decommissioning
11 option. Was the plant using safe store or decon?
12 We'll talk a little bit about entombment. None of the
13 plants currently going through decommissioning are
14 using the entombment option. So, we have a whole list
15 of variables that we looked at. And we went through
16 our matrix process again, looking at each activity in
17 determining whether the variables would change the
18 environmental impact.

19 So, after we look at our matrix, we'd come
20 up with a list of environmental impacts and we
21 determined whether those impacts would be generic. As
22 I said, if the impacts are the same for all the
23 plants, if we see the same environmental impact, then
24 we considered it generic, and then we assessed whether
25 the impact was small, moderate or large. And we have

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1 a definition of what small, moderate and large means
2 in the document. And if the environmental impacts
3 were determined not to be generic, then we said they
4 were site-specific; in which case, the licensee would
5 be required to do a site-specific analysis when they
6 performed that activity. They'd have to do a site-
7 specific analysis for that particular environmental
8 issue.

9 So, to summarize, we identified our scope.
10 We went through and did our initial evaluation of
11 environmental impacts based on the environmental
12 issues and the activities for decommissioning. We
13 took a closer look identifying all the variabilities
14 that you might find from plant to plant. And we
15 matched the impacts and the plant variability and then
16 we came up with our goal. We had a goal which was to
17 create and determine which environmental impacts would
18 be generic and which ones would be site-specific. And
19 then, for the generic environmental impacts, we
20 assessed the significance: small, moderate or large.

21 Now, where did we get the information that
22 we used for our environmental analysis? We came up
23 with information from a wide variety of places. We
24 did an extensive search of the open literature. We
25 looked at the public comments to see what type of

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1 information we could get from that. We talked to the
2 NRC staff that had experience.

3 And then, we made a number, my team and I
4 made a number of site visits to actually collect
5 information from the plants that were going through
6 decommissioning. And chose a variety of plants so we
7 could get a wide range of information. And then, for
8 the sites, since we couldn't go to all the sites
9 unfortunately, we requested that the utilities provide
10 additional information to us that we could use in our
11 analysis. And we got information from, I think, just
12 about all of the utilities provided us information
13 that we used in our analysis. So, we have data from
14 all of the decommissioning plants that we've used in
15 our evaluation.

16 Now, let me take just a minute to talk
17 about the findings in very general terms. You should
18 have in your handout with the slides, at the back,
19 it's the summary that is found in a number of places
20 in the document that gives a little more explanation
21 of this. These are the generic, these are the issues
22 that we identified as generic. And you can see for
23 most of them, we said the impact was small.

24 Let me take just a second to talk about
25 the two issues, socio-economics and postulated

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1 accidents where we've identified a significance of
2 small, moderate or large. In this case, we've given
3 the criteria and what we found was that based on
4 possible location and what the licensee may have done
5 for mitigation, we saw in our evaluation that there
6 was a range of impacts. I mean, a range that would
7 fall under the criteria for small, moderate or large
8 for the socio-economics.

9 And so, we couldn't just characterize it
10 as small, moderate or large. You may find any of
11 these. And for postulated accidents, we've given
12 criteria for what, where a licensee would have a small
13 impact or moderate or large. And typically, we expect
14 to find a small, the postulated accidents would fall
15 under small. But if you look in the document, you'll
16 see that there's criteria for moderate or large also.

17 Now, we have identified for the other
18 issues when an impact would be moderate or large. But
19 those, we consider outside of the envelope and those
20 would require some additional analysis. So, just for
21 these two issues, we could have small, moderate or
22 large. Now, these are a list of a site-specific
23 issues: land use, aquatic and terrestrial threatened
24 and endangered species, environmental justice, and
25 cultural and historical resources.

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1 There's three of them here, land use,
2 aquatic and terrestrial ecology, and cultural and
3 historical resources where there's only a limited
4 aspect that would be considered site-specific. And
5 that is, if you have activities that are outside of
6 the area that's already been disturbed at the plant.
7 So, if you have a decommissioning activity and you
8 have to disturb areas that have not previously been
9 disturbed and there's no assessment, that's considered
10 site-specific for these issues. Threatened and
11 endangered species and environmental justice will
12 always require a site-specific analysis.

13 I'm going to turn it back over to Chip for
14 just a minute. But there's another, you'll see
15 there's another view graph there that I've put in for
16 people that may be interested in a little more
17 definition of the options of decommissioning. But
18 unless someone is interested, I'm not going to discuss
19 that.

20 MR. CAMERON: Okay. And we're going to go
21 to all of you for questions in just a minute. I just
22 want to emphasize that if you do want to submit
23 written comments, the deadline is December 31st of
24 this year. And they can be mailed to that address,
25 Chief of Rules and Directives. They can be submitted

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1 to the NRC in person, and you can email the comments
2 to that particular website. If you have questions on
3 the process, you can call either Dino Scaletti or Mike
4 Masnik.

5 And I just want to emphasize that in
6 addition to comments on the substantive approach of
7 the GEIS, if you think that something isn't clearly
8 explained in the GEIS, the NRC would also appreciate
9 comments on that aspect of it as well. And I guess
10 that what I'd like to do is see if there are questions
11 from anybody on Eva's presentation, including again
12 questions about whether the document clearly explains
13 how it will be used, et cetera, et cetera, et cetera.
14 Paul?

15 MR. GAYNOR: Hi, I'm Paul Gaynor from the
16 Environmental Law and Policy Center of the Midwest.
17 My question is with regard to the site-specific
18 issues. One of the site-specific issues is
19 threatened, I'm sorry, aquatic and terrestrial
20 ecology. And it says, the rationale, activities
21 occurring beyond previously disturbed areas. And I'm
22 wondering what the definition of a previously
23 disturbed area is. Is there a time frame or how that
24 is defined?

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1 MS. HICKEY: By previously disturbed, we
2 mean an area that's already been used on the site
3 during operations. So, they've already plowed it, dug
4 it up, built something on it, made a parking lot, had
5 a building placed on it as opposed to an area that's
6 still forested or a meadow. Does that clarify it?

7 MR. GAYNOR: So, it's at any time during
8 the operation? So, if they --

9 MS. HICKEY: Right.

10 MR. GAYNOR: Had the initial 40-year
11 license period and then a 20-year extension --

12 MS. HICKEY: Right.

13 MR. GAYNOR: Any previously disturbed area
14 within that time frame?

15 MS. HICKEY: Right.

16 MS. MUSIKER: I have a follow up question.
17 So, could you explain to me what that would mean for
18 an intake for water for cooling at the facility.
19 Would that, does anything happen to that intake
20 position during decommissioning?

21 MS. HICKEY: That's a good question. I
22 can't recall exactly, go ahead, Mike. You obviously
23 --

24 MR. CAMERON: Okay, Mike. I'll bring this
25 over to you.

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1 MR. MASNIK: Michael Masnik, NRC. What we
2 have found at most facilities is the intake and
3 discharge structure, first of all, are structures that
4 are not typically taken out of service for some time.
5 They're usually kept in place for the majority of the
6 decommissioning. The ultimate goal of the licensee
7 will depend, will determine what will happen to that
8 intake and discharge structure.

9 For example, typically, these plants
10 become valuable industrial locations, and having an
11 intake and discharge structure might be of value to
12 some future use of the facility. And since it is a
13 permanent structure, licensees probably would like to
14 keep them if they can. As was mentioned earlier
15 though, there are some States that require them to
16 dispose of all structures on the property, in which
17 case, the intake and discharge structure would be
18 removed.

19 To answer your question, and that is that
20 would be considered previously disturbed areas. Now,
21 those kinds of activities, in-river activities of
22 course are normally very closely watched by the
23 coastguard and also by the state. So, there would be
24 some oversight on those activities as well.

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1 MS. HICKEY: Yes, there's another issue
2 there. Sometimes the structures are not on the site.
3 And that was one of the issues that we discussed in
4 determining scope, is that we were looking at
5 decommissioning the activities that actually occur on
6 the site. And so, if those structures are outside of
7 the site, then they're not considered in this
8 document.

9 MR. CAMERON: Eva, you mentioned the term,
10 you used the term envelope and I guess that gives me
11 an opportunity to see if everybody understands how, if
12 this GEIS were finalized the way it is, how a NRC
13 licensee would use the document, particularly would
14 use the generic impacts, how that envelope would apply
15 to the analysis that they did. Can you give people an
16 idea of how that works?

17 MS. HICKEY: Yes. Yes, if you're looking,
18 when the licensee is beginning or before they conduct
19 an activity, they would look at the GEIS and do an
20 evaluation. And if all of their impacts for all of
21 the environmental issues fall within our statement,
22 what we state as our envelope, then they will not have
23 to do a further analysis. They can conduct that
24 activity. On the other hand, if they are outside of
25 the bounds that we've identified in the document, and

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1 those are all expressed in detail in Chapter 4, that's
2 where the detail is, then they would have to do a
3 site-specific analysis.

4 Now, another point would be is if they
5 perform an activity or if a new technology comes along
6 that's not evaluated in this document, then they would
7 have to do a site-specific analysis because it would
8 be outside of the envelope that we've identified in
9 the supplement.

10 MR. CAMERON: Okay, thank you. Is there
11 questions on that aspect or anything else? Any of
12 this presentation at this point?

13 (No response.)

14 MR. CAMERON: Okay. Well, let's go, thank
15 you, Eva.

16 MS. HICKEY: Okay.

17 MR. CAMERON: Let's go to the second part
18 of the meeting which is to give those of you who wish
19 to an opportunity to make a formal or a more formal
20 comment to us. And we're going to go to a
21 representative of the Illinois Department of Nuclear
22 Safety, Michael Klebe, to come up and give us a
23 comment.

24 Michael?

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1 MR. KLEBE: Well, first of all, on behalf
2 of the Department of Nuclear Safety, first of all, my
3 name is Michael Klebe. I'm with the Illinois
4 Department of Nuclear Safety.

5 First of all, on behalf of the department,
6 I'd like to welcome the Nuclear Regulatory Commission
7 to Chicago and hope that your stay here is pleasant.
8 And oh, by the way, since we're having a little bit of
9 financial problems in the state, spend as much as you
10 can so we can maximize the tax revenue that we can
11 gain from you folks.

12 I will try to be brief, but for those of
13 you that know me, that's not a strong suit. So, I
14 will try to keep my remarks to five to ten minutes per
15 comment.

16 MR. CAMERON: We're going to send out for
17 coffee. All right.

18 Go ahead, Mike.

19 MR. KLEBE: All right. One thing really
20 jumped out when I was reading this voluminous document
21 that almost destroyed my printer. Under Chapter 4,
22 Environmental Impacts, Section 4.3.8, and it's located
23 on page 4-26, and that's of the version that I
24 downloaded out of the Adams website rather than the
25 one that you have. If you do it a chapter at a time,

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1 it works out much better. If you try to do it in the
2 two block one, it just freezes up.

3 The thing that really jumped up and
4 disturbed me was about middle of the paragraph. It
5 says, "All decommissioning activities were assumed to
6 determine their potential for radiation exposures that
7 may result in health effects to workers and the
8 public.

9 This section considers the impacts to
10 workers and the public during decommissioning
11 activities performed up to the time of the termination
12 of the license. And potential radiological impacts
13 following license termination are not considered in
14 this supplement. Such impacts are covered by the
15 generic environmental impact statement in support of
16 rulemaking on radiological criteria for license
17 termination of NRC licensed nuclear facilities."
18 NUREG-1496, NRC document dated 1997.

19 I don't think that you can remove the
20 long-term radiological impacts of using entombment as
21 a decommissioning method from this environmental
22 impact. I understand that this document pretty much
23 worries about, you know, what sort of problems are you
24 going to have while you're tearing down the

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1 structures, while you're -- parking lots, buildings,
2 whatever.

3 But if you're going to pursue entombment
4 as a disposal option which according to your slide in
5 the 1988 draft or '88 GEIS was assumed not to be a
6 viable alternative, you really need to look beyond
7 license termination into the long-term radiological
8 impacts because that stuff is going to be there
9 forever until it decays away.

10 And depending upon what system structures
11 and components you put into the containment building,
12 that time period of potential radiological hazard may
13 be relatively short, it could be really long. And so,
14 I think this, the scope, the basic premise of these
15 radiological impacts are understated. The scope is
16 just inadequate.

17 And the other, well, and also talking
18 about that, if you take a look at the date of this
19 NUREG-1496 being 1997, that was also in a time frame
20 when entombment really wasn't being talked about. NRC
21 held their first meeting on entombment as a viable
22 reactor decommissioning option in December of 1999.
23 So, I doubt that those long-term radiological impacts
24 are assessed in this EIS, referenced in NUREG-1496.

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1 So, I don't think that anyone has answered
2 that question as to what it is. So, what I see
3 happening here is you're setting yourself up with
4 entombment, whether it be entombment 1, entombment 2,
5 entombment 3, 12, whatever, is you're not looking at
6 the long-term radiological impacts to the residents of
7 the state of Illinois or the residents of Connecticut
8 or whatever state it may be.

9 MR. CAMERON: I'm going to make a
10 suggestion. Before you guys jump in, we're going to
11 let Michael finish his comments, so he can entirely
12 set out his statement on the record -- If there are
13 clarifications that the NRC has to offer, and I'm
14 saying clarifications rather than debate, then I would
15 appreciate it if you could provide that later. But
16 let's let Michael finish.

17 MR. MASNIK: What about clarifications to
18 his statement?

19 MR. CAMERON: Let's let Michael finish,
20 and then --

21 MR. KLEBE: Yes, we can discuss this all
22 night. I'm not going anywhere until Sunday, so I'm
23 here for the weekend.

24 MR. CAMERON: Go ahead, Michael.

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1 MR. KLEBE: So, in that regard, I don't
2 think the long-term radiological impacts are being
3 addressed and the scope of this document is inadequate
4 as it relates to radiological impacts. And I realize
5 that that could be site-specific or just generic, but
6 I think in generic terms, that should be addressed.
7 I mean, you have some general idea of entombment 1,
8 what sort of nuclei inventory you may have or
9 entombment 2, what sort of nuclei inventory you would
10 have. And then you would be able to give some idea as
11 to what are those impacts.

12 Now, the other place where, and I admit
13 that some of my comments are maybe not germane to this
14 specific EIS, but they do relate to entombment as a
15 decommissioning option. One of the things that your
16 GEIS did not consider is termination of a license
17 under entombment. Entombment is basically the
18 isolation of contaminated reactor stuff from the
19 environment. Now, if you, and that's just a rough
20 estimate on a definition. But if you look at
21 definitions of disposal, it's going to be pretty
22 similar.

23 Disposal is defined as isolating
24 radioactive material or radioactive waste from the
25 biosphere from the environment in a facility suitably

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1 designed. Now, the one thing that this did not, this
2 GEIS did not consider is regulatory authority as to
3 whether or not the NRC can license the disposal or in
4 essence allow entombment as a reactor decommissioning
5 option in agreement states because in agreement
6 states, it's those states such as Illinois that has
7 licensing authority over the disposal of low-level
8 radioactive waste in the state.

9 So, your GEIS does not consider the give
10 and take between the federal government and the
11 agreement states as to who really has the authority to
12 say that yes, you can entomb a reactor. And from the
13 state of Illinois' perspective, it's not you folks,
14 it's us. Because what you are proposing in this GEIS
15 as an allowable decommissioning option is the disposal
16 of low-level radioactive waste.

17 It's not residual contamination as
18 identified under Sub-part E of Part 20 because let's
19 face it, if it was a residual contamination, it would
20 be low activity, probably high volume there because of
21 accident, and it would not be something that you
22 would, some system structure or component that you'd
23 be deliberately picking up and putting in a
24 containment building and then grounding it in place or
25 somehow, you know, preventing intrusion into it. So,

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1 in that regard, it's just a basic fundamental
2 philosophy that you folks don't have the regulatory
3 basis to allow that in agreement states, while you may
4 in non-agreement states. You don't, at least from my
5 perspective, our department's perspective, have that
6 authority in Illinois.

7 In addition, entombment could potentially,
8 in the state of Illinois, create seven disposal
9 facilities. And your GEIS does not address the
10 potential conflict with other state or other federal
11 statutes as it relates to authority of disposal of
12 low-level radioactive waste. That being the federal
13 low-level radioactive waste policy act of 1980 as
14 amended in 1985 which specifically gave states the
15 responsibility for providing for the disposal of low-
16 level radioactive waste generator within their states.

17 And the kicker, the great benny that the
18 federal government, the Congress gave to the states to
19 do this is the ability to form regional compacts
20 specifically to limit the number of radioactive waste
21 disposal facilities in the country instead of every,
22 you know, 15 states having one. The idea is there
23 would be a couple. And what this GEIS is proposing to
24 allow to happen, not necessarily requiring to happen
25 but allowing to happen, is the potential to do bunches

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1 of these. Seven in the state of Illinois, if you look
2 at the reactor stations that we have in the state.

3 And I realize that this only relates to
4 the nuclear power stations, but in previous NRC
5 federal register notice, they specifically asked
6 whether or not entombment should be allowed for non-
7 reactors as well. So, I can see this really running
8 far afield or far counter to the federal act. And I
9 think, in terms of authority as it relates to those
10 federal acts, you know, there's no talk here in this
11 GEIS about consultation with regional compacts.

12 The Central Midwest Compact Commission,
13 having a meeting here in Chicago on Saturday on how
14 specifically, the specific authority to say where low-
15 level radioactive waste generated within the state of
16 Illinois will be disposed of. It can either allow it
17 to be exported from the region to go to an out-of-
18 state facility or it could require it to remain in-
19 state. So, I see your GEIS as not addressing those
20 issues in terms of, again, authority as to who can
21 really say something can happen.

22 So, those are just the general ones on top
23 of my head. I would refer you back to correspondence
24 that we have sent you regarding entombment and the
25 wisdom of it and how it relates to state's authority

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1 and to 10 CFR Part 20, license termination. We've,
2 you know, sent you guys correspondence on this before.
3 I don't think any of our comments have ever been
4 addressed in those regards because we seem to keep
5 asking the same questions.

6 But anyway, I would love to have a
7 dialogue with you folks from the NRC and from PNNL and
8 I would like to hear what sort of comments you have
9 back. And let's start the discussion.

10 MR. CAMERON: Okay. Well, thank you,
11 Michael.

12 What I'd like to do is to make sure that
13 we get everybody else who wants to make a presentation
14 on the record and then to, I think we're going to have
15 time, to clarify some points that the NRC might want
16 to make about perhaps your assumptions in the, about
17 what's in the document, or to ask you to make sure
18 that they understand all of your comments, too and
19 have a discussion on it. I don't necessarily think we
20 need to have a debate on some of this tonight because
21 the NRC needs to evaluate your comments. And they
22 were very, very good substantive comments, right on
23 things that we need to consider.

24 But let's go to Debbie now and then we'll
25 go to Paul and perhaps Lynne. And then, we'll see

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1 what time we have and then we'll open it up. Sure.
2 Okay. Do we need the piano? No, okay. All right.
3 And Eva, could you --

4 MS. HICKEY: Want me to sit down?

5 MR. CAMERON: Why don't you guys go up to
6 the, you want to go up to the podium? Because I think
7 it's going to be more comfortable for you up there.
8 And just, you know, identify yourselves for the record
9 and then we'll go from there. Thank you.

10 MS. MUSIKER: Thank you. I'm Debbie
11 Musiker with the Lake Michigan Federation. The Lake
12 Michigan Federation is an environmental organization
13 with offices in Illinois and Michigan. And our
14 mission is to work to restore fish and wildlife
15 habitat, conserve land and water and eliminate toxic
16 pollution in the watershed of America's largest lake.

17 MR. GAYNOR: I'm Paul Gaynor from the
18 Environmental Law and Policy Center for the Midwest,
19 also known as ELPC. ELPC is a Midwest regional public
20 interest environmental advocacy organization working
21 among other things to achieve cleaner energy resources
22 and implement sustainable energy strategies.

23 MS. MUSIKER: We want to make clear that
24 we'd like to see the decommissioning of nuclear plants
25 go forward and we want it to go forward in the safest,

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1 most environmentally sound manner. Because our 18
2 nuclear reactors on the United States side of the
3 Great Lakes which represents almost 20 percent of the
4 world's freshwater supply, we have taken a preliminary
5 look at this document and we want to provide a voice
6 for the lakes. As decommissioning plants go forward,
7 we will be monitoring them and commenting on them as
8 appropriate.

9 Today, we wanted, I have three points to
10 make on behalf of both organizations and then we had
11 several questions as well. First, we don't believe
12 you should allow nuclear reactor owners under safe
13 store to store waste for 60 more years after
14 operations cease. We think the document should narrow
15 the parameters.

16 Why? Because we have many concerns, some
17 of which relate to institutional memory. In the
18 document, it mentions that one advantage of going
19 forward with decontaminating and decommissioning the
20 facility right away is that you have people on the
21 site that know about the facility. They know how it
22 was put together. They know how it was operated and
23 they can better advise operations for decommissioning.

24 Second, we're concerned about the
25 financial viability of the companies that own these

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1 sites. During a 60-year period, the companies may go
2 bankrupt and that may leave the sites unaccounted for.
3 We're also worried about the uncertainty associated
4 with the cost of disposing radioactive material later.
5 We understand that safe store is preferred because of
6 lower costs later, but because of Yucca Mountain and
7 other uncertainties about disposal, we're concerned
8 about those hanging costs. Excuse me.

9 We're also concerned about safety. With
10 reduced staffing as mentioned in the document, there's
11 an increased risk of accident or the threat of attack
12 on these sites with huge environmental and human
13 consequences. With regard to the threat of attack, I
14 think this relates to our second point. This document
15 was prepared after September 11th. It doesn't, thank
16 you so much.

17 The document was prepared after September
18 11th, but it doesn't seem to respond to September 11th.
19 We think the document should be responsive to the
20 events of September 11th. What is NRC going to do to
21 make sure that facilities are protected and secure
22 during decommissioning? Has that changed in response
23 to the threat of terror attack? We think it should.

24 My understanding is that releases are, if
25 there is the possibility of release during

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1 decommissioning, then that should be something that
2 should be accounted for especially in light of
3 concerns of attack. Finally, considering the
4 importance of the Great Lakes to the world and to this
5 region, we think that the impact should be addressed
6 specifically. It is not appropriate to lump them
7 under a generic impact analysis.

8 I also have a fourth issue that I have
9 after hearing the opening talk by Dino Scaletti. The
10 new issues that he raised as the basis for this
11 document, the list of three, "rubblization", et
12 cetera, to me reflect a sense that NRC is looking for
13 ways to make it easier to finish the decommissioning
14 process rather than thinking about ways to make it
15 safer or more environmentally sound. And that
16 concerns me. It seems to be driven by how we can
17 facilitate the process, making it happen more quickly
18 or with less cost as opposed to considering the safety
19 issues. All of those issues relate to doing it more
20 quickly and less costly.

21 Those are my comments. We do have a
22 couple of questions to you that we wanted to put on
23 the record. And I hope, when we have an opportunity
24 to have a conversation, they can be answered. On page
25 1-6 of the document, it references that, there's

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1 literature saying that materials can be stored safely
2 for 30 years, yet safe store can go on for 60 years.
3 And I don't understand how you can reconcile that.
4 There may be a way but I just don't understand it from
5 the document. There maybe a way that you can make
6 that more clear in the document.

7 Second, we would like to see a place in
8 the document where you're comparing the risks,
9 environmental risks associated with dismantling the
10 facility immediately versus storing the material and
11 keep putting the facility in safe store. It's
12 referenced in the document that there are higher risks
13 sometimes of dismantling immediately because the
14 material is more radioactive. But it doesn't show a
15 comparison of the risks associated with storing it
16 versus dismantling it in the short term.

17 That relates to our last question about
18 safe store and that number, 60 years, and our question
19 is what was the technical basis for establishing a 60-
20 year period? And is it still appropriate?

21 MR. GAYNOR: And then, I just wanted to
22 add one other question that I thought of while
23 listening to Eva Hickey's presentation which is, I
24 understand that in determining the generic EIS, you
25 analyzed the variables at particular sites and this

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1 relates to a point that Deb made which is, a question
2 I have is what consideration was given to the location
3 of the facility as a variable in determining?

4 I saw on PowerPoint, there was one of the,
5 it was Other, and I don't know if the site location
6 was included in as an Other in the variable. And I'd
7 be interested in what kind of depth of analysis went
8 into that if it was a variable that was considered.

9 MR. CAMERON: Okay. Well, thank you both
10 very much. And we do have, I think, one more speaker.
11 And before we ask her to come up, just let me suggest
12 an agenda for the rest of the evening. I think that
13 the first two questions that Debbie stated really need
14 to be taken as comments on the draft and we will do
15 that. And then, there were two points of information,
16 one that Debbie raised which was what's the basis for
17 the 60 years. We'll get to that. And then, the
18 question that Paul asked about how was location
19 factored in.

20 We'll answer those questions but before we
21 get to that, I think we need to see if there are some
22 clarifications that the NRC wanted to make in terms of
23 some assumptions that Michael might have made and some
24 questions perhaps to Michael to better understand what
25 his comments were. And if we have time, we can go

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1 back and talk about the issue of: isn't all of this
2 just facilitating, or not all of this, but the point
3 that you made, Debbie, about facilitating, making it
4 easier for decommissioning.

5 But first of all, let's finish with the
6 formal comments and ask Lynne to come up to use the
7 podium.

8 MS. GOODMAN: Yes. Thanks.

9 MR. CAMERON: Okay. And just tell us who
10 you are and your affiliation and we'll go from there.

11 MS. GOODMAN: Hello, I'm Lynne Goodman.
12 I'm responsible for decommissioning Detroit Edison's
13 Fermi I facility. I am going to submit detailed
14 comments. These comments here will be at the summary
15 level. They'll give you a flavor of what kind of
16 comments I have. And hopefully, that can at least
17 give you an idea and provide some benefit.

18 I'd like to start by saying I think this
19 is a good beneficial effort to have this generic
20 supplement. I think it's going to help do evaluations
21 of the environmental consequences of what we're doing.
22 It's going to make sure in some cases that we look at
23 the right things and don't skip anything. I do agree
24 with the overall conclusions of the document. And
25 also, I agree on what should be considered generically

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1 and what is site-specific because there are some site-
2 specific issues.

3 My detailed comments, I'm going to have
4 some comments on the details of my facility, Fermi I,
5 ranging from the status of our decommissioning since
6 we are inactive, the final act of decommissioning,
7 what kind of fuel the plant used, the type of
8 containment, some of our systems. We are cleaning up
9 sodium residues. While that's not real different than
10 other decommissioning activities, I'd like that stated
11 in the report. It is one of the type of chemical
12 activities and chemical hazards that are being done as
13 part of decommissioning.

14 And also, I'll talk about, I'll have
15 comments on the site's size. So, other areas, oh, and
16 one other item is there are some aspects of the
17 regulations that are specific to light water reactors
18 and I just think the document needs to reflect those
19 rather than all reactors. For example, the specific
20 formula for the decommissioning cost. Not that we
21 don't have to have plant's decommissioning fund and
22 have to look to the adequacy because the regulations
23 do require that and we do do that. But the formula
24 doesn't apply to non-light water reactors.

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1 Okay, now, to take another area, I think
2 there are some additional hazards that have to be
3 addressed in the discussion of the hazards. Some of
4 these are addressed, but I think there are additional
5 hazards. I don't think these would affect the overall
6 conclusions of the document. But I think there is
7 more detail, and to some extent, some hazards that are
8 not fully addressed in the document. And some of
9 these are in the areas of occupational hazards.

10 There's a lot of decommissioning work that
11 you have to be very careful about. In my position,
12 industrial safety is actually the thing I spend the
13 most time on. And it can be done safely, but most
14 aspects of decommissioning involve an occupational
15 safety issue.

16 I think the document needs to address
17 fires, chemical hazards, particulates, spills. And
18 I'll provide more detailed comments in writing on how
19 I think this needs to be addressed. But again, I
20 don't think that affects any conclusions. I just
21 think there are more issues that need to be addressed
22 in the document.

23 For the next comment, for older plants, in
24 some cases, there are some differences in the physical
25 configuration from what was described and assumed. An

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1 example is like there may not be active ventilation
2 systems. That doesn't mean we aren't going to be
3 monitoring our releases and filtering them as needed.
4 We are just going to have to install those systems as
5 needed to properly protect the air quality and so
6 forth. But we may not have those systems still in
7 process.

8 Also, in the licensing arena, our
9 documents may not include what has already been
10 assumed to be in the documents for plants that
11 recently shutdown. And in those cases, like for the
12 environment hazards, if we don't have it already
13 covered in the document, we're going to have to cover
14 it in the license termination plan. So, I think what
15 will be covered is just, it may not already be covered
16 in the document.

17 I have one very specific comment. And
18 this is something in Appendix G that I wanted to put
19 on the record. And I was very surprised to read of
20 excess malignancies that have been experienced at
21 doses of 10 REM. This is contrary to the health
22 physics and radiological health handbook and other
23 material that I've read over the more than 25 years
24 I've spent in this industry. And I think that needs
25 to be addressed and reevaluated.

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1 One last comment I want to make is that I
2 recommend highly that in future efforts of this sort,
3 the communications to get information about specific
4 plants be with those specific plants or otherwise
5 actions be taken to ensure that all plants are
6 covered. I know in this case that some plants were
7 not contacted, and other plants were contacted with
8 very little time to respond. And I think you'd have
9 a better document if you get everybody's input up
10 front.

11 So, I do plan to submit detailed comments
12 on the document. I really think it is a good effort.
13 And I think it will help those of us that are
14 decommissioning or during environmental reviews,
15 ensure that what we are doing is covered or know that
16 we need to cover it specifically.

17 MR. CAMERON: Okay. Thank you very much,
18 Lynne, for those comments. Because I think we're
19 probably, when we go to what I would call
20 clarification in terms of some of the points that
21 Michael raised might lead us into a wide-ranging
22 discussion, why don't we see if we can provide
23 information on the two questions that we had, that is,
24 the 60 years? What's the technical basis for the 60
25 years? And if we need to go back to Debbie to clarify

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1 what the question is, we'll do that. And then, to
2 Paul's question about how location was considered.

3 I'm assuming that the NRC was taking note
4 of those questions. Can we have someone who can
5 address the basis for the 60 years? Michael, all
6 right.

7 MR. MASNIK: I can honestly say that I
8 can't, and I don't think there is a really good
9 explanation of how the agency arrived at 60 years. As
10 we were talking for a few minutes before the meeting,
11 I have heard, and I don't know if this is really the
12 way it happened. They assumed that cesium had a half
13 life of 40 years, and they figured a half life and a
14 half would be a significant reduction in the facility
15 and would make a significant difference in the
16 occupational exposure as you dismantled it. But, you
17 know, I've looked into this before and I really can't
18 find a good explanation. None of the other NRC
19 personnel here have an opinion on this.

20 There was one other question that you had,
21 one other issue raised and that was on the
22 bankruptcies. I don't know how familiar you are with
23 our regulations, but we do have a requirement that the
24 money be collected and placed in a secured trust. And
25 that money is basically unreachable by the licensee.

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1 There are very strict limits as to when, for example,
2 the licensee can access that money.

3 We've had a number of license transfers
4 where the ownership of the plant has changed. That,
5 it's been pretty clear that that fund transfers with
6 the facility and that the losing entity no longer has
7 any claim over that money. Yes?

8 MR. CAMERON: And if you could just give
9 us your name again for the transcript?

10 MS. MUSIKER: Sure. Sure. Debbie
11 Musiker, Lake Michigan Federation. That makes sense
12 to me if a facility has a full life or the expected
13 life. But what happens to a facility that shuts down
14 prematurely and they haven't actually collected
15 sufficient funds for what's necessary for
16 decommissioning and then, they go bankrupt? And that
17 situation still poses a risk.

18 MR. MASNIK: That is a very good question.
19 The requirement to put aside money for decommissioning
20 trust fund was part of regulations that were put into
21 place in 1988. Very shortly after that, we had a
22 series of plants that shutdown that had essentially
23 insufficient money in their decommissioning trust
24 fund. And it was a significant concern to the
25 Commission.

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1 What has happened is, in some cases, the
2 licensee has placed, we believe, we don't know for
3 certain, but we believe that the licensee had chosen
4 safe store for several years or a number of years to
5 accumulate funds in their trust fund. Fortunately,
6 the PUC's, the state PUC's allow the collection of
7 that money, and as a result, those funds have solidly
8 been built up even in the plants that have permanently
9 ceased operation shortly after 1988.

10 You know, as we enter the second
11 millennium now, we've had roughly 13 years. Those
12 funds of the remaining plants that are still operating
13 now are, I wouldn't say fully funded, but
14 significantly funded. And it appears that they will
15 be funded to a level where we won't have to worry
16 about whether or not there is sufficient money.

17 You know, if the money is not available,
18 there are other remedies. We discussed this back when
19 Three Mile Island had an accident. And ultimately,
20 the responsibility falls on the federal government
21 although we've never had to exercise that, so, at
22 least not in power reactors.

23 MR. CAMERON: And Mike, do you want to try
24 to answer Paul's question about location or should we
25 turn to someone else on that? And do we need Paul to

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1 address that again, to just repeat what his question
2 is?

3 MR. MASNIK: I would ask that Eva, since
4 she did the matrix that --

5 MR. CAMERON: Okay. And Eva, you've noted
6 Paul's question? Okay, good.

7 MS. HICKEY: Yes.

8 MR. CAMERON: This is Eva Hickey.

9 MS. HICKEY: Okay. I think the question
10 was did we use the location of the plants as one of
11 the variables. And in fact, we did do that. We
12 looked at location from the perspective of does it sit
13 on a lake, on an ocean, and also from a perspective of
14 population. So, we did in fact include location, and
15 I guess the variabilities that location would have on
16 the decommissioning activities. Is that adequate?
17 Okay.

18 MR. CAMERON: All right, thank you. Eva,
19 when Michael started giving us his comments, I noticed
20 that you and several other NRC people reacted which is
21 what usually happens when we have people from IDNS
22 talk. But could you give us what you were going to
23 say just so that we know that?

24 MS. HICKEY: Yes. I want to make one
25 clarification point on one of your initial comments on

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1 entombment. And if you look at what we say is in
2 scope in the document, we are only looking at
3 activities that lead to termination of a license for
4 unrestricted use. And entombment would not end up
5 there. You would have a restricted use when you get
6 to the point of license termination.

7 So, what we did is we evaluated the
8 impacts for preparing a facility for entombment. And
9 in fact, a site-specific analysis would need to be
10 done at the time of license termination for
11 entombment. So, I'd like to just make that as a
12 clarification. I know you had a number of other
13 issues.

14 MR. CAMERON: And Michael, do you want to
15 either give us an additional comment or find out what
16 exactly Eva meant by that?

17 MR. KLEBE: Mike Klebe, IDNS. I have no
18 problem just starting up this dialogue because what
19 you just said really perplexes the bejeebers out of
20 me. And I'm not, for the court report, I'm not quite
21 certain how you spell bejeebers. So, what you're
22 saying is you're going to set something in motion,
23 i.e., entombment in motion, you're going to allow a
24 nuclear plant operator to take all the contaminated
25 system structures and components, put them in a

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1 containment building as part of this GEIS and you're
2 not concerned at what's going to happen at license
3 termination? Because that's in essence what you just
4 said.

5 MR. CAMERON: I think that Mike can --

6 MR. KLEBE: I mean, in terms of
7 radiological exposure.

8 MR. CAMERON: Let's let Mike clarify this
9 issue.

10 MR. MASNIK: Let me back up a little bit.
11 First of all, the 1988 GEIS didn't come to the
12 conclusion that entombment was probably not a viable
13 option at that time. Since that time, since 1988,
14 there has been some interest on the part of industry
15 and there's been some interest on the part of the
16 staff to explore the possibility of entombment. The
17 staff was directed by the Commission to take a look at
18 this.

19 There is an additional parallel effort
20 within the agency, and I know you're, I'm sure you're
21 familiar with the fact that we just put out an
22 advanced notice of proposed rulemaking on entombment,
23 which is inviting the public to assist the staff in
24 coming up with a possible regulation that addresses
25 this. Now, to be honest with you, we were put in a

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1 position of looking at environmental impacts on an
2 activity in which the Commission has really not
3 decided what direction to go, that it should go in.

4 And what we decided to do was look at the
5 environmental impacts associated with the activities
6 related to preparing the facility for entombment,
7 knowing full well that there would likely be future
8 rule making that dealt with the issue of entombment
9 and the issues of, the other issues that you raised
10 during your presentation. So, I think what Eva was
11 trying to say was that restricted release, which is
12 allowed by 10 CFR Part 20 Appendix E, would require a
13 site-specific analysis. And therefore, it could not
14 be considered generically by this document. And
15 therefore, we're not evaluating it. Okay.

16 Now, the rule making that would
17 potentially allow for some sort of entombment would
18 also require some environmental assessment and could
19 likely result in an environmental impact statement
20 that would deal with the issues that you raised, the
21 long-term effects and the issue of whether or not the
22 states would be involved in the process, which I
23 assume they would be but I'm not sure how that would
24 occur.

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1 MR. KLEBE: Okay. Mike Klebe, IDNS. Just
2 so I understand, so you've got, you just said that
3 because this is going to lead to a restricted use
4 license or release under restricted use limitations --

5 MR. MASNIK: Let me, we, the staff, made
6 the assumption that it would be restricted release.
7 You have to understand we're --

8 MR. KLEBE: Okay. That's fine. That's
9 fine. And you said that for that restricted release
10 use is going to need analysis on a site by site basis.
11 Then why are you dealing with entombment in a generic
12 EIS? Because just by your statements, entombment is
13 not a generic activity. It is a completely site-
14 specific activity. Maybe I'm just not seeing the
15 picture right but --

16 MR. CAMERON: Let's try to answer that.

17 MR. MASNIK: Again, a very good question.
18 The way the regulations are set up, when a plant shuts
19 down, they can begin to decommission the facility.
20 They can do that without any specific authority by the
21 NRC. In other words, we don't have to grant them
22 approval to begin to dismantle the plant.

23 The licensee essentially can perform the
24 majority of the decommissioning without any formal
25 environmental review and approval which would involve

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1 an environmental assessment. Towards the end of the
2 decommissioning, when you get close to the end of
3 decommissioning, the licensee has to submit a license
4 termination plan. And that license termination plan
5 is an amendment to the license and it contains the
6 requirement to do an environmental assessment at that
7 point.

8 However, from the period of time that they
9 permanently cease operation until the license
10 termination plan which would be typically a couple of
11 years before they plan to terminate the license, and
12 that could be a seven to ten to 50-year period, there
13 is no environmental assessment required. So, what
14 this generic environment impact statement does, if the
15 licensee so chooses to entomb and if the NRC has
16 regulations in place that would allow for the
17 entombment, it covers the period of time that the
18 plant permanently ceases operation until the site-
19 specific analysis is done under the license
20 termination phase.

21 MR. KLEBE: Mike Klebe, IDNS. Doesn't
22 that set the utility up for a great risk exposure to
23 go down the path of entombment and find out that 40,
24 50 years, whatever time frame they elect when they try
25 to terminate their license of someone saying, no, you

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1 can't do that? I mean, because of the radiological
2 impacts?

3 MR. CAMERON: Okay. That may be another
4 question that we will treat, or may not, that's a
5 question we should treat as a comment perhaps assuming
6 that it gets to the scope question again. But I want
7 to make sure that the explanation that we're giving
8 here is clear to everybody. And I think that we have
9 a question from Debbie.

10 And Mike, in your last statement, people
11 could read that as the licensee, the NRC had no
12 regulatory structure in place in terms of the licensee
13 dismantling the facility. And I think that Dino, you
14 may want to clarify that particular aspect of it.
15 That's what your question was? Okay, well, go ahead.

16 MS. MUSIKER: Because you said, Debbie
17 Musiker, Lake Michigan Federation. You said that a
18 licensee could go ahead and dismantle without formal
19 approval and I thought that the licensee based on the
20 document, the licensee had to submit the PSDAR and
21 then there was a 30-day public process. Were you not
22 counting that because that didn't directly relate to
23 the question?

24 MR. CAMERON: And I think you were just
25 doing some shorthand there. And besides the PSDAR,

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1 you may want to revisit the statement that Dino had on
2 the slides about there are certain things that they
3 have to be within a framework. Okay, if you could
4 just give us a summary of that, Mike?

5 MR. MASNIK: Yes. The regulations, I'll
6 give the summary first and then I'll answer your
7 question on PSDAR. The regulations are very specific
8 and they say that you cannot perform any activities
9 outside the scope of any previously issued
10 environmental assessments. And that forces the
11 licensee, as I mentioned earlier, to do this review
12 each time they make a change to the plan.

13 However, the 1996 change to the
14 regulations established the post-PSDAR as the vehicle
15 for telling the NRC and the public what they planned
16 to do with the facility. There is a requirement to
17 submit a document. This document is typically 15 to
18 20 pages long. It talks about schedule. It talks
19 about what they plan to do. There's some discussion
20 on funding and there is some discussion on
21 environmental impacts.

22 But that document is submitted to the NRC
23 and it is not submitted as a licensing action. We do
24 not review and approve it. It's given to us, and 90
25 days after the NRC receives that document, they then

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1 can begin major decommissioning activities, major
2 decommissioning dismantlement activities. But there
3 is no review and approval of that document.

4 One other thing I might mention, there is
5 a license, there are things called tech specs. And
6 periodically, during decommissioning, the licensee
7 will change that license. Those changes to the
8 license require licensing documents to be submitted to
9 the NRC and it's a license amendment. And that
10 procedure allows for an opportunity for hearing and it
11 also requires the staff to do an assessment.

12 But it's only on that particular change to
13 the license. There's no overall assessment of the
14 plan to decommission or how they plan to decommission
15 the plant.

16 MR. CAMERON: Okay. Thanks, Mike. I just
17 want to note for the record that we have heard four
18 people talk, giving us four formal comments. In our
19 discussion that we're having now, we don't want to be,
20 we're trying to provide information and have a
21 discussion. And that's not the NRC's response to
22 these comments. And also, the discussion is going to
23 be raising other comments that I think the NRC should
24 consider, even though they weren't "formal comments".

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1 I want to turn to Barry Zalzman in a
2 minute to just give us a little word on what the NRC
3 has been doing in the aftermath of the September 11th
4 tragedy in New York in terms of nuclear power plants.
5 But I think there's one important question that the
6 NRC should answer that was raised by Debbie which is,
7 she noted the slide that Dino put up about new
8 activities. And she wondered whether this wasn't
9 making it easier for or are these activities somehow
10 trying to make it easier for licensees to
11 decommission.

12 And I wondered if the NRC could just
13 address that, and I'll go to Dino for this, about how
14 these particular issues get on the NRC's radar screen.

15 MR. SCALETTI: Thank you. Dino Scaletti
16 from the Nuclear Regulatory Commission. Your comment
17 on making it easier for the licensees, I think the
18 focus of this whole thing is making it easier on the
19 NRC staff. We have to evaluate these actions and we
20 do have a number of actions before us for partial site
21 release, and we had the issue of "rubblization" come
22 up through the course of decommissioning and we
23 addressed it in the document. It's so that we don't
24 have to address it each time that a licensee comes to

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1 us or each time that we get in a situation where we
2 need to focus on it.

3 Clearly, it may help the licensee, but
4 it's more help to the staff, it's more help to the
5 public. We've had a number of public meetings at all
6 power reactors that are decommissioning. There is a
7 public meeting each time they submit a PSDAR. The
8 public has asked us to update it. The document is
9 old. The industry has asked us to update the document
10 as well as other government agencies. EPA has
11 requested that we update the document, so we're doing
12 it.

13 And these issues are before us, so if we
14 could evaluate them generically, then we are planning
15 on doing it. Now, from the point of radiological
16 "rubblization" that would, if you bust up a building
17 a plan to bury it onsite and cover it over and try to
18 meet your site release criteria with that, that's not
19 covered by this document. That would be a site-
20 specific evaluation that would have to be done.

21 The only thing we're doing with
22 "rubblization" here is if you're, if somebody --
23 material, would break it up and spread it around, bury
24 it over, as you know, the interaction with the
25 concrete and the leaching of material to other

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1 concrete, that may have an impact on the environment
2 and we look at that. So, that's not making it easier
3 on the industry. It's making it easier on us as well
4 as hopefully the public.

5 MR. CAMERON: And one other note, to use
6 partial site release as an example, Dino mentioned if
7 there are a lot of individual licensees that are
8 requesting partial site release, if the NRC addresses
9 that generically, part of the question that it's
10 addressing is should the NRC allow site release. And
11 that's where the public comment on the rule making
12 comes in rather than just restricting that issue to
13 perhaps one facility and the community around that
14 facility. It allows a broader input to that question
15 of should there even be site release, or if there
16 should, under what circumstances?

17 So, and I'd like Barry to tell us a little
18 bit about what the NRC is doing about terrorist
19 threats. Barry?

20 MR. ZALCMAN: Thank you, Chip. Barry
21 Zalcman, I'm the environmental section chief. So, all
22 matters with nuclear power plants in the Office of
23 Nuclear Reactor Regulation fall within my domain.
24 Both Mike and Dino work on my staff. I'm going to
25 talk a little about environmental philosophy for a

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1 minute. Like you, I have no problem chewing up time.
2 I love the microphone whenever I get a chance. And
3 then, I'll specifically address the issues related to
4 September 11th.

5 It's very important to realize that the
6 agency is really making an attempt to represent what
7 we know about whatever issue faces us. For
8 decommissioning, we had information representing
9 change. We had practice representing change. We had
10 technology representing change since the year of 1988
11 in the decommissioning arena.

12 We have an obligation, we believe, to
13 further the purposes of NEPA in updating this generic
14 environmental impact statement. I will tell you how
15 -- the NRC has a program dealing with power reactor
16 license renewal where we have issued a generic
17 environmental impact statement for license renewal.
18 We have already made a commitment to update that on a
19 ten-year basis because we made certain assumptions.
20 We will gain experience, plans are going through the
21 license renewal process.

22 We have that obligation to further the
23 purposes of NEPA, not necessarily because there is a
24 specific action pending before the Commission, but
25 it's to make sure we can represent the facts as best

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1 we can represent them at some point in time. This
2 represents snapshots in time. Ten years from now, we
3 may be back doing the same thing again.

4 Okay. Now, regarding the events of
5 September 11th, America is not going to be the same.
6 Nuclear power plants represent a vital part of the
7 nation's infrastructure. We have reacted as an agency
8 very quickly to the events of September 11th issuing
9 advisories to our licensees. We have an operation
10 center. We have incident response centers in the
11 regions. They have been manned 24-7, not just with
12 staff but also with managers to interact on an inter-
13 governmental basis, which means at the federal level
14 as well as the state levels.

15 Licensees have reacted as well, and
16 they've gone into this higher level of security
17 awareness. But one thing that you should stay aware
18 of is things will change. Things are likely to change
19 in a security arena. The Commission led by the
20 Chairman has requested the staff to do a topdown
21 review of all matters related to security. It's just
22 not plants that are shutdown, it's operating plants as
23 well.

24 So, you would expect in the next several
25 months that the agency is going to develop the

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1 recommendations, the staff will develop the
2 recommendations, set it before the Commission and we
3 will continue to get further guidance from the
4 Commission as to how we're to respond. These horrific
5 events have really hit not just the NRC but every
6 single federal agency dealing with the nation's
7 infrastructure across all issues. The agency has
8 reacted, we will continue to react.

9 One last point, and this deals with the
10 entombment issue. We have within the document the
11 reference to the advance notice for a proposed rule
12 making on entombment. That was dated October 16th.
13 That had just come out as we were putting this
14 document to bed. It was reflected within that. We
15 are seeking comment on that process as well so you'll
16 have an opportunity to weigh in on that.

17 License termination is a different
18 licensing action than some of the actions at the
19 earlier stages of decommissioning. And sometimes,
20 it's not apparent to the general public that these are
21 divided into smaller steps. But we're trying to make
22 the representation of the facts as we understand them.
23 We have surveyed the industry as best we can.

24 We worked with industry representatives if
25 not necessarily the licensees directly. We worked

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1 with the Nuclear Energy Institute to coordinate some
2 activities. If we were to send out surveys, they'd
3 have to be cleared with the Office of Management and
4 Budget. So, working with the industry stakeholders,
5 there was an effort to try and collect that
6 information.

7 And now, in this public comment period,
8 every licensee is a member of the public. So, we
9 expect the licensees are going to reflect upon the
10 information representing their plants and give us any
11 updates that they have to either changes in practice
12 or activities that they performed already or
13 information that we thought we were representing well
14 being corrected by our licensees. So, hopefully, I
15 covered a couple of the areas.

16 We are reaching out to the public in what
17 we do. I will tell you, as we issued the draft, it
18 could have been sufficient just to issue it with a
19 Federal Register notice. We don't believe that that
20 is adequate. So, we sought to reach out to the
21 public, to have public meetings. On generic
22 environmental statements, it's not uncommon to have
23 one meeting in Washington, DC.

24 We elected to come to the regions because
25 we felt this is where the stakeholders are. So, it's

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1 an opportunity for you to share with us. We hope
2 through the opportunity to share with you, you can go
3 back, focus your attention on issues that you think
4 are very important for us to consider. And the public
5 comment period, again, is until December 31st. We
6 tried to give you a variety of different ways to
7 interact with us. We'll be happy to take all the
8 comments.

9 As Chip mentioned at the outset, whatever
10 you say on the record today will be treated exactly
11 the same way as if you submitted it before December
12 31st. So, we look forward to that as well. Okay?

13 MR. CAMERON: Thank you very much, Barry.
14 Is it possible to get the people who are here who
15 might want to see that ANPR on entombment? Could we
16 get them a copy of that? Perhaps ship that to them in
17 the mail? I'm not sure when the comment period ends
18 on it but if people are interested in that, we'll send
19 you a copy of that. And yes, if you could just
20 provide that to -- up front, we'll send you a copy of
21 the ANPR.

22 I think the issue, the issues that Michael
23 has raised are clearly on the record for the NRC to
24 evaluate. The reason I'm saying that now is because
25 I think there is a, you know, there could be a good

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1 discussion among whoever wanted to participate in it
2 on the issues. I think it's going to be awkward to do
3 that on the record right now. We do have the comments
4 preserved for evaluation. And I would just invite all
5 of you after we do adjourn the meeting to have that
6 particular discussion.

7 And I just want to thank you for the NRC
8 staff, not only for being here but the particularly
9 high quality of the comments that we got from Lynne,
10 from Debbie, from Paul, from Mike tonight. We really,
11 really appreciate that because that's what we need to
12 shine the light on this document so that it can be a
13 good document. And I would just ask, is there any,
14 does anybody have a question or anything that we,
15 before we adjourn, that we should clear up? Before we
16 go to the informal discussion perhaps? Lynne?

17 MS. GOODMAN: Lynne Goodman. I just have
18 one additional request, I'll put it. Within the last
19 short period, there's a number of decommissioning
20 related documents that have come out for review. And
21 while I appreciate the NRC has been very busy, in
22 addition to this GEIS supplement, the entombment
23 proposed rule making, there's also I think, I got two
24 documents this week regarding decommissioning cost
25 reports and I think the cost estimate formats.

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1 If there is any way that we could not have
2 to get all the comments in the very short comment
3 period, if it could be extended, I'd really appreciate
4 it because it's going to be a very busy December for
5 me.

6 MR. CAMERON: Okay. So noted, and I would
7 expect the NRC to actively consider that particular
8 request. I mean, it may not, there may not be
9 anything that could be done, but let's not let it just
10 fall off the end of the world.

11 Okay. Well, I would just invite everybody
12 to stay around and, okay, we do have one final comment
13 from the NRC Office of General Counsel.

14 MR. LEWIS: It is my obligation as the
15 attorney from the NRC here, as Chip knows, to be fired
16 from my position in the NRC if I didn't say something
17 while I was here because my manager will look at the
18 record and if I didn't say something, he'll think I
19 wasn't here.

20 MR. CAMERON: That's enough though, isn't
21 it?

22 MR. LEWIS: Actually, as a number of
23 points were being made, I thought of things I could
24 say about them. But then, really, a number of people
25 from the staff really said all the things I was

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1 probably going to say about them with maybe one or two
2 exceptions which I will comment on.

3 But the first point I wanted to make is
4 that, and I don't want to sound like I'm just trying
5 to stroke people here. I was just absolutely blown
6 away by how carefully thought out and knowledgeable
7 the comments were that were given to us today. I
8 mean, the first time I became aware that this was
9 going to be the case was when Lynne walked in and I
10 saw that she had about every other page of the GEIS
11 supplement dog-eared. And I said, oh, boy, we're in
12 trouble.

13 But you know, that has proven to be the
14 case from everyone who spoke. I mean, you haven't had
15 the document a heck of a long time. And my hats off
16 to you because in fact what I really, my basic
17 reaction is you hit on a lot of tough issues, and in
18 fact, they are the issues that made the preparations
19 document tough for the NRC staff. They're real,
20 they're all real issues.

21 We had an assignment from our Commission
22 to prepare this document. We didn't, in every case,
23 have all of the information on all things that we were
24 going to discuss and were told to discuss in the GEIS.
25 But we put out there, we disposed everything we did

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1 know about it. An example I will mention is
2 entombment.

3 Many of the things that Mike said from
4 IDNS are, I mean, I could tell, I assume he's seen the
5 ANPR, but if he hasn't, he's clairvoyant. I mean he
6 really is raising all of these very tough questions
7 that we tried to articulate in the options, including
8 the question of putting a whole new part of the
9 regulations in, and including the question of are we
10 talking about disposal. All of these things are, you
11 know, serious questions that the NRC has to be
12 concerned about.

13 What happened with decommissioning is that
14 we had an overlap of time. We had already been told
15 by the Commission that we should use the GEIS as best
16 we could to address the entombment option because in
17 a number of industry, in a number of workshops
18 attended by industry and other members of the public,
19 they had expressed interest in it, and so there it
20 was. It's out on the table and the Commission told
21 us, address it as best you can in the GEIS.

22 The fact of the matter is that we know,
23 and I believe we have made clear in the document, that
24 this GEIS is not going to be able to satisfy NEPA as
25 to entombment. We know that we are going to have to

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1 address, we are going to have to do another document
2 for that rule making. And Mike clearly identified
3 some of the tough questions that would have to be
4 addressed in that rule making.

5 Another example of where you, this was
6 Debbie who picked up on issues that, you know,
7 identified serious issues the NRC has had to spend
8 considerable time thinking about them. You talked
9 about bankruptcies. I mean, in today's world we
10 simply can't put blinders on. We have to recognize
11 that what we used to think of as the most stable of
12 companies are now going into bankruptcy.

13 And so, you know, this is something we are
14 truly giving an increasing amount of attention to. In
15 fact, it involves, it's a very complicated matter
16 because it gets very involved with Internal Revenue
17 Service, regulations. One thing I'll point out that
18 I think needs a little clarification on what Mike said
19 is there may even be situations in which the selling
20 company does remain responsible for the
21 decommissioning funds.

22 MR. CAMERON: And Steve, you are, we
23 sometimes kid you about going on on these issues, but
24 I think that --

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1 MR. LEWIS: What do you mean sometimes?
2 You always do.

3 MR. CAMERON: Right. But I think that we
4 appreciate you generally and we fully support all of
5 the comments that you've given to everybody. And you
6 can see that Steve is an expert on decommissioning,
7 and bankruptcy particularly. But I think we probably
8 need to stop now with the formal record. But I would
9 encourage all of you to sit with Steve and Mike and
10 talk about some of these issues. And Steve, please
11 give people your number and, you know, website, no,
12 not website. He should probably have his own website,
13 but your email so that they can talk to you about
14 this.

15 And thank you for those, I think, very
16 appropriate closing comments. And I think we're
17 adjourned. All right? Thank you all, please, for
18 being here.

19 (Whereupon the meeting was adjourned at
20 9:05 p.m.)

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