

ATTACHMENT 1

Official Transcript of Proceedings

NUCLEAR REGULATORY COMMISSION

Public Meeting on the Draft Supplemental
Impact Statement on Decommissioning of
Nuclear Facilities

Docket Number: (not applicable)

Location: San Francisco, California

Date: Tuesday, December 4, 2001

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Pages 1-64

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
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PUBLIC MEETING
ON THE DRAFT SUPPLEMENTAL IMPACT STATEMENT
ON DECOMMISSIONING OF NUCLEAR FACILITIES

+ + + + +

TUESDAY

DECEMBER 4, 2001

+ + + + +

SAN FRANCISCO, CALIFORNIA

+ + + + +

The Nuclear Regulatory Commission's Public Meeting held at the Argent Hotel, Metropolitan Room 1, Second Floor, 50 Third Street, San Francisco, California, at 7:00 o'clock p.m., Chip Cameron, facilitating.

NRC STAFF and PRESENTERS:

STEWART BROWN, Office of Nuclear Materials

Safety and Safeguards, NRC

CHIP CAMERON, Facilitator, NRC

EVA ECKERT HICKEY, Pacific Northwest

National Laboratory

STEPHEN LEWIS, Office of General Counsel, NRC

MICHAEL T. MASNIK, Ph.D., Senior Project

Manager, NRR, NRC

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1 NRC STAFF and PRESENTERS:

2 DINO SCALETTI, Senior Project Manager, NRR, NRC

3 D. BLAIR SPITZBERG, Ph.D., Chief, Fuel Cycle

4 and Decommissioning Branch, Region IV

5 BARRY ZALCMAN, Chief, Environmental Section,

6 NRR, NRC

7 MIKE SACKSCHEWSKY, Pacific Northwest National

8 Laboratory

9

10 OTHERS PRESENT:

11 JACQUELINE CABASSO, Executive Director, Western

12 States Legal Foundation

13 DALE NESBITT, Board of Directors, Western States

14 Legal Foundation, Peace Action, and

15 retired engineer, Lawrence Berkeley

16 Laboratory

17 PATRICIA OLSON, TriValley CAREs, Livermore,

18 California

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A-G-E-N-D-A

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

(7:05 p.m.)

1
2
3 MR. CAMERON: Good evening, everyone. I
4 just want to welcome all of you to the Nuclear
5 Regulatory Commission's Public Meeting on a Draft
6 Generic Environmental Impact Statement on Reactor
7 Decommissioning.

8 My name is Chip Cameron. I'm with the
9 Office of General Counsel at the NRC, and I'm going to
10 serve as your facilitator for tonight's meeting. And
11 I just want to go over three things very briefly with
12 you before we get started.

13 First I'd like to talk a little bit about
14 the objectives for tonight's meeting. Secondly, a few
15 words on format and ground rules for the meeting
16 tonight. And, lastly, I want to give you an Agenda
17 overview so you know what to expect tonight.

18 In terms of objectives, the NRC is here to
19 explain the findings and the evaluations that are in
20 the NRC's Draft Generic Environmental Impact Statement
21 on reactor decommissioning, including how that Generic
22 Environmental Impact Statement might be used in the
23 NRC's Regulatory Program.

24 And I should say at this point that this
25 -- so that people are not confused -- this Draft

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1 Generic Environmental Impact Statement is being called
2 a "Supplement," so it's a Draft Supplemental Generic
3 Environmental Impact Statement. And the reason it's
4 being called a Supplement is that, as you'll hear from
5 the NRC staff, back in 1988 the NRC prepared a Generic
6 Environmental Impact Statement on decommissioning. It
7 covered a wider range of facilities than just nuclear
8 power plants.

9 Now the NRC has prepared an additional
10 analysis, and that's called the Supplement. So it's
11 a Draft Supplemental Generic Environmental Impact
12 Statement.

13 A second objective, in addition to
14 providing the information to all of you on what's in
15 this Draft Environmental Impact Statement, is to hear
16 your comments and concerns on the material that is in
17 the Generic Environmental Impact Statement.

18 And I want to emphasize the word "Draft."
19 In other words, this document, the conclusions in this
20 document are not going to be used by the NRC until
21 comments from the public are evaluated and a final
22 GEIS issued. So your comments are very important to
23 us.

24 And there is a public comment period for
25 written comments on this document, but we're here

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1 tonight to talk to you personally about it.

2 You may hear some information tonight that
3 will help inform any written comments that you do want
4 to make on this. But let me just emphasize that any
5 comments that you make here tonight are going to be
6 given the same weight as any written comments that are
7 received.

8 In terms of the format for tonight's
9 meeting, the format flows out of the two objectives I
10 mentioned.

11 First we're going to have two brief
12 presentations by the NRC and consultants working for
13 the NRC, to give you some background on this document.

14 And after each of those presentations
15 we'll go out to you for questions about those
16 presentations.

17 The second segment of tonight's meeting is
18 an opportunity for anyone who wants to give us more
19 formal comments on the document.

20 There are some sign-up cards out there.
21 And the purpose of those is to give us an idea of how
22 many people want to speak. And since we sort of have
23 a small universe here tonight, I don't think we have
24 to worry too much about that.

25 So if you didn't sign up, when we get to

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1 that part of the meeting, if you do want to make a
2 comment, please feel free to offer that.

3 I'm asking that people try to be concise
4 and that we try to at least, as a guideline, keep it
5 to between five and ten minutes in terms of your
6 comments.

7 And I would also ask that only one person
8 speak at a time, not only so that we can give our full
9 attention to whomever has the floor, but we are taking
10 a transcript. Our stenographers are here, and that
11 will allow a clear transcript to be taken.

12 The transcript will be available, I take
13 it, on the NRC website. And if anybody wants to
14 request a transcript, we'll mail you one if you don't
15 have access to the internet.

16 In terms of agenda, we're going to start
17 with Mr. Dino Scaletti, who is right over here.
18 Dino's going to talk about the process that has been
19 used to prepare this particular document. Dino is the
20 NRC's Project Manager for the preparation of this
21 Generic Environmental Impact Statement.

22 He's been an Environmental and a Safety
23 Project Manager at the NRC for 27 years. In fact, he
24 has just announced his retirement, so he has about
25 four more months, I guess, to go. But his prior

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1 experience was with the United States Navy's Landbased
2 Nuclear Program. And he has a graduate degree in
3 zoology and a bachelor's in electrical engineering.

4 The second presentation is going to be
5 done by the experts that are helping the NRC to
6 prepare this document. We have Eva Eckert Hickey
7 right here, who is the Project Manager for the
8 preparation of this Environmental Impact Statement at
9 Pacific Northwest National Lab.

10 Eva is a health physicist and she not only
11 has a background in environmental health physics but
12 in emergency preparedness and operational health
13 physics. She did work as an environmental engineer
14 for the Nuclear Regulatory Commission. She has a
15 master's degree in health physics from the Georgia
16 Institute of Technology.

17 And I would just thank all of you who have
18 taken the time to be with us tonight. And I would
19 just emphasize, in addition to hearing information
20 from the NRC and giving us comments, we have a number
21 of people from the NRC Headquarters staff here and
22 also from the Regional Office, our Regional Office in
23 Arlington, Texas, the people who do inspection and
24 enforcement. We have people here from our Office of
25 General Counsel.

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1 Please take the opportunity to talk with
2 them and to get their phone numbers, email addresses,
3 and feel free to contact them if you have any
4 questions about this project or other projects. We'd
5 like to maintain some continuity of communication with
6 the public. So I would encourage you to do that.

7 And one final thing. We do have something
8 that's -- this is an evaluation form, Public Meeting
9 Evaluation Form, that the NRC tries to get input from
10 people on how well we did with the public meeting, how
11 we could improve it. So they are out at the desk out
12 there. If you would be kind enough to give us some
13 comments, we'd appreciate that.

14 And with that I think let's turn it over
15 to Dino for a presentation on the process, and then
16 we'll open it up to questions from all of you.

17 Dino.

18 MR. SCALETTI: Thank you, Chip.

19 As Chip said, my name is Dino Scaletti.
20 I'm from the NRC's Office of Nuclear Reactor
21 Regulation. And I'd like to also thank you for coming
22 tonight, and then take a few minutes to give you a
23 little overview of why we're here tonight.

24 However, before we start, I'd like to ask
25 you, request one thing. When the music starts next

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1 door, please, if you'd refrain from dancing until
2 after the public meeting, we'd all appreciate it. It
3 may get noisy in here, so we'll do our best to get
4 going as quickly as we can.

5 The U.S. Nuclear Regulatory Commission was
6 formed as a result of to the Atomic Energy Act of 1954
7 and the Energy Reorganization Act of 1974.

8 The NRC's mission is to regulate the
9 nation's civilian use of nuclear materials, to ensure
10 protection of the health and safety of the public and
11 workers, and to protect the environment. It is an
12 independent agency made up of five commissioners and
13 a multitude of staff.

14 The five commissioners are chosen by the
15 president for five-year terms and the president so
16 designates the chairman of the Nuclear Regulatory
17 Commission.

18 The purpose of this meeting is to discuss
19 Draft Supplement 1 of the Generic Environmental Impact
20 Statement, or the GEIS, on decommissioning of nuclear
21 facilities.

22 In 1988 the NRC published NUREG-0586 in an
23 Environmental Impact Statement that evaluated the
24 impacts of decommissioning of a whole variety of
25 facilities, including power reactors. This Supplement

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1 addresses only permanently-shutdown nuclear power
2 plants.

3 We will explain what the GEIS is, how it
4 is used, and when it is used. But first I'd like to
5 describe the process set forth in the National
6 Environmental Policy Act, or NEPA, for developing this
7 GEIS.

8 Then I will turn the discussion over to
9 Eva Hickey. And she will tell you the approach for
10 discussing the document, including defining the scope,
11 establishing a process for environmental analysis, the
12 format of the report, and finally the conclusions of
13 the report.

14 We plan to keep our presentation brief
15 because we want to give you, the public, time for your
16 questions and comments.

17 The National Environmental Policy Act of
18 1969 places the responsibility upon federal agencies
19 to consider significant aspects of the environmental
20 impact of a proposed action. It requires all federal
21 agencies to use a systematic approach to consider
22 environmental impacts during the decisionmaking
23 process.

24 The National Environmental Policy Act, the
25 NEPA process, also is structured to ensure that

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1 federal agencies will inform the public that it has
2 indeed considered environmental concerns in the
3 decisionmaking process and invite public participation
4 to evaluate the process. This meeting we're holding
5 tonight is part of that process.

6 What does NEPA require? NEPA requires
7 that an environmental impact statement or assessment
8 be prepared for all major federal actions.
9 Supplements to drafts or final EISs, or environmental
10 impact statements, are required when there are
11 significant new circumstances or information relevant
12 to the environmental concerns.

13 We've had several revisions to the
14 regulations and gained considerable additional
15 experience from actual decommissioning. The original
16 GEIS was published in 1988, some 13 years ago. It is
17 now an appropriate time to supplement and revise the
18 original GEIS on decommissioning.

19 Generic EISs are allowed in cases where
20 there is a need to address generic impacts that are
21 common to a number of similar-proposed actions or
22 similar facilities.

23 This process provides for the preparation
24 of a generic environmental statement to avoid the time
25 and the expense of repeated reviews of essentially the

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1 same material.

2 When an environmental issue has been
3 resolved generically there is no need to conduct
4 another detailed review of the same issue unless there
5 is significant new information related to some aspect
6 of that issue.

7 The NEPA process follows certain steps,
8 and the NRC is required to follow this process, which
9 provides consistency of all EISs prepared by all
10 federal agencies.

11 The first step in the process is a Notice
12 of Intent, which was published in the *Federal Register*
13 in March 2000. The Notice of Intent informed the
14 public that an EIS, or in this case, Supplement 1 to
15 NUREG-0586 was going to be published.

16 A second notice was published in May of
17 2000. Four public scoping meetings were held: In San
18 Francisco, Chicago, Boston, and Atlanta. Scoping
19 meetings are used early in the NEPA process to help
20 federal agencies decide what issues should be
21 discussed in the EIS.

22 The scoping meetings helped us define the
23 process, proposed action, and determine any peripheral
24 issues that might be associated with the proposed
25 action. The public provided comments on the scope of

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1 the Supplement through mid-2000.

2 Once scoping was completed, the NRC
3 collected data and evaluated the environmental impact
4 associated with reactor decommissioning. The
5 environmental evaluation addressed the impacts of the
6 proposed action in a generic manner.

7 That is, the impacts that may occur at all
8 or most decommissioning nuclear power plants, the
9 alternative to the proposed action, and the impacts
10 that could result from those alternatives are
11 addressed.

12 Finally, we looked at mitigating measures,
13 those measures that can be taken to decrease the
14 environmental impact of the proposed action.

15 After the environmental evaluation was
16 completed, a Draft Supplement to the Environmental
17 Impact Statement, or NUREG-0586, was published for
18 public comment on November 9, 2001. All federal
19 agencies issue these draft EISs for public comment.
20 Now we are having more public meetings to gather your
21 comments on the Supplement.

22 After we gather the comments and evaluate
23 them, we may change portions of the Supplement based
24 upon those comments. The final EIS is scheduled to be
25 issued in mid-2002.

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1 What exactly is a Supplement 1 to the
2 Generic Environmental Impact Statement for
3 Decommissioning? A Generic Environmental Impact
4 Statement identifies the environmental impacts that
5 may be considered generic for all nuclear reactors.

6 It defines the envelope of impacts
7 predicted, predicting the level of impacts for a
8 specific set of generic conditions. It also
9 identifies the environmental impacts that need to be
10 considered in more detail as site-specific issues for
11 the facility.

12 Supplement 1 provides updated information
13 on the environmental impact from decommissioning
14 activities for permanently-shutdown nuclear power
15 plants.

16 The original document for decommissioning
17 was published in 1988. Therefore, it's over 13 years
18 old. Since the original document was published, there
19 have been new regulations related to decommissioning
20 that were issued.

21 For example, regulations requiring the
22 submittal of a Post-Shutdown Decommissioning
23 Activities Report and a License Termination Plan.

24 In addition, since 1988, there has been an
25 increase in the amount of decommissioning experience

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1 in the U.S. Currently 21 commercial nuclear reactors
2 have permanently ceased operation. As a result, there
3 are over 300 years of decommissioning experience
4 resulting in much new information available regarding
5 the environmental impacts for decommissioning a
6 commercial nuclear power plant.

7 And, finally, there have been several new
8 issues that were not considered in the 1988 GEIS.
9 These include rubbleization, which in this case entails
10 completing the decontamination of and disposing of
11 slightly contaminated building rubble onsite, such as
12 a way to meet the site-release criteria.

13 Another issue is partial site release
14 which involves releasing the clean part of the site
15 before the decommissioning is complete.

16 And, finally, entombment, which although
17 was considered in the 1988 GEIS, it may need to be
18 reconsidered in somewhat different form to allow for
19 the possibility of some substantial decontamination or
20 removal of large components prior to entombment.
21 These new issues are addressed in the Supplement 1.

22 Supplement 1 will be used to focus the
23 analysis of environmental impacts. It will help us
24 determine which of these impacts are site specific and
25 need to be considered individually for each nuclear

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1 power plant that is decommissioning and which impacts
2 are generic and can be evaluated as part of this GEIS.
3 And then not reviewed or evaluated every time a plant
4 enters decommissioning.

5 This allows us to spend the time and
6 resources that are required to focus on the impacts
7 that are applicable for that particular site.

8 The Supplement does not preclude a site-
9 specific look at each facility. Some issues like
10 those related to the presence of endangered and
11 threatened species will always be site specific and
12 will need to be addressed separately from this
13 Supplement.

14 Our final purpose is to determine if
15 additional rulemaking for decommissioning is required.
16 If so, this Supplement may support the rulemaking
17 activities.

18 The Supplement is used throughout the
19 entire decommissioning process. The NRC's regulations
20 require that no decommissioning activity be performed
21 that would result in significant environmental impacts
22 that have not been previously reviewed.

23 This means that every time the licensee
24 starts a new activity, they must determine if it would
25 result in an environmental impact that was not

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1 reviewed in the Supplement, or in the site-specific
2 final Environmental Impact Statements, or any
3 subsequent environmental analyses that were reviewed
4 and approved by the NRC.

5 In addition, a hard look is taken at the
6 environmental impacts at the stage of the Post-
7 Shutdown Decommissioning Activities Report when it is
8 submitted and when the license termination plan is
9 submitted.

10 Now unless you have any questions, I'd
11 like to turn this program over to Eva Hickey.

12 MR. CAMERON: Thank you, Dino.

13 Before we go to Eva to actually talk about
14 the substance of the document, Dino talked about the
15 rule of the Nuclear Regulatory Commission. He talked
16 about the process used for this Environmental Impact
17 Statement. He mentioned the NRC's decommissioning
18 process.

19 And are there any questions anybody has
20 about that process before we go on? And there may be
21 things that occur later, questions we can get to them
22 then.

23 Yes, sir. And if you could just give us
24 your name and affiliation, if appropriate.

25 MR. SOKOLSKY: David Sokolsky with

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1 Humboldt Bay Power Plant.

2 Will this Supplement replace entirely the
3 previous NUREG-0586?

4 MR. SCALETTI: It will replace in entirety
5 -- or it's a standalone document for nuclear power
6 reactors, yes.

7 MR. SOKOLSKY: Okay.

8 MR. SCALETTI: The other facilities within
9 -- NUREG-0586 is still applicable to those facilities.

10 MR. SOKOLSKY: All right. That was my
11 understanding in looking at this Draft Supplement,
12 that anything from the previous NUREG is included in
13 the Supplement that's applicable.

14 MR. SCALETTI: That's correct.

15 MR. SOKOLSKY: So when we respond we no
16 longer have to look at the previous issue, just this
17 Supplement.

18 MR. SCALETTI: That is correct.

19 MR. SOKOLSKY: Okay. Thank you.

20 MR. CAMERON: Thank you, David.

21 Other questions at this point before we go
22 on?

23 Okay. Thanks, Dino.

24 And let's go to Eva Eckert Hickey to talk
25 about the report itself.

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1 MS. HICKEY: Thank you and good evening,
2 everybody. We're glad to see you tonight, and we look
3 forward to hearing your comments.

4 As Chip said, my name's Eva Hickey. I am
5 the Project Manager Task Leader for the Pacific
6 Northwest National Laboratory Team who is supporting
7 the NRC in the development of the Supplement for the
8 Generic Environmental Impact Statement, NUREG-0586.

9 We have a multidisciplinary team that has
10 been working on this effort. I have one of the other
11 individuals on the team here with me tonight. And
12 we're here to answer your questions on the Supplement.

13 Before I get into my talk, I decided it
14 was probably important to give you a couple of
15 definitions of some words that we continue to use.
16 And the first one is "decommissioning." And this
17 definition comes directly out of the NRC regulations.

18 It says, "Decommissioning is... The
19 process of safely removing a facility from service
20 followed by reducing residual radioactivity to a level
21 that permits termination of the NRC license."

22 And I think you will understand why this
23 definition is important as I continue on with my talk.

24 Next I wanted to talk a second about what
25 we mean by "generic." And we've defined this in the

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1 Supplement, but let me go over it briefly.

2 We have identified a generic impact as one
3 where the environmental impact has been determined to
4 apply either to all plants, or all plants with certain
5 characteristics, all plants that may be all
6 pressurized water reactors or perhaps all plants that
7 sit on the ocean. And I'll talk a little bit more
8 about those characteristics.

9 In addition, when we talk about "generic,"
10 we also gave a significance level to an impact.
11 That's defined in the Supplement also, and those are
12 small, moderate, and large.

13 And also we looked at the mitigative
14 measures from an environmental impact. Those were all
15 the areas that we looked at in determining whether an
16 impact was generic.

17 I wanted to talk a minute about -- backing
18 up to when we first started talking about developing
19 Supplement 1 to NUREG-0586. Dino has addressed a lot
20 of these issues. But we had to determine exactly an
21 approach, how we were going to develop the scope for
22 this document and how we were going to determine what
23 those environmental impacts for decommissioning were.

24 So these are all the things that we were
25 talking about several years ago as we were identifying

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1 how we were going to put this document together. And
2 obviously we decided we needed to determine which
3 environmental impacts would be generic and which ones
4 are site specific.

5 So with that in mind, in the rest of my
6 presentation I'm going to go over how we determined
7 the scope, give you a little bit of explanation on
8 that, and then describe the process that we used for
9 identifying the environmental impacts for
10 decommissioning.

11 We'll talk a little bit about the sources
12 of information that we used in our analysis. And then
13 I'll give you a brief summary of the findings.

14 Now in order to keep my presentation
15 short, I can't go into a lot of detail. So I'm going
16 to be giving you a general overview. And I hope after
17 my presentation, if you have specific questions on our
18 approach or anything in the document, feel free to ask
19 them. If not tonight, submitting written questions
20 later would be acceptable.

21 I wanted to show you in the lifecycle of
22 the nuclear power reactor facility where we were
23 looking in our analysis. And you see we've got the
24 plant construction and then licensing. And I know
25 it's a little difficult to see, I'm sorry, but you've

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1 got it in your handout. Plant operation is either 40
2 years or it could be an additional 20 years if there
3 is a license renewal.

4 But where we are actually looking, as
5 decommissioning activities that occur after the plant
6 closes down, those activities typically occur 5 to 60
7 years after the plant shuts down. So that's in the
8 timeline of our analysis.

9 The scope. This was a very important
10 upfront part of our effort, was determining what the
11 scope of the document was.

12 First it's based on the original 1988
13 Generic Environmental Impact Statement, NUREG-0586.
14 So we started with that. But then we had, based on
15 the NEPA process, scoping meetings that Dino has
16 talked about.

17 We took the comments from the scoping
18 meetings and we evaluated those to determine which
19 ones were in scope and out of scope. And I want to
20 take just a minute to try to describe how we did that
21 evaluation process.

22 Appendix A in the Supplement discusses
23 those comments that were considered in scope and where
24 we addressed them in the document. And then if you're
25 interested, there's a summary of the entire scoping

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1 process that's been published by NRC also.

2 So we would get a comment and we would
3 look at it. And first we would try to decide whether
4 it fit into the definition of decommissioning. And,
5 if it did, then we considered that particular comment
6 within the scope.

7 We also looked at whether any of the
8 issues were those described by the Commission, the
9 issues that the Commission asked us to look at. And
10 Dino discussed those a bit. Rubblization was one.
11 Partial site release was another, and entombment. So
12 those particular issues would be considered in scope.

13 And then, I guess rather than those
14 issues, those comments in scope, comments that might
15 be out of scope are those that would be addressed
16 outside of the NRC purview.

17 An example of that might be if there's a
18 state requirement that the plant decommission back to
19 a greenfield state, NRC does not -- because that was
20 a state requirement, NRC would not have any overview
21 on that.

22 And then also there's a number of issues
23 that are looked at elsewhere in NRC's regulations and
24 have an environmental review. For example,
25 radiological impacts, after the termination of the

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1 license, are considered under another Generic
2 Environmental Impact Statement for license
3 termination. So that particular issue would not be
4 considered in our Supplement.

5 Now if you're interested in looking, all
6 of the activities that we considered and the issues
7 are identified, the in-scope and out-of-scope, in
8 Table 1-1 of the Supplement. And that's on page 1-4.

9 So now we've established our scope. We
10 need to decide our approach. And how we did this was
11 we looked at the decommissioning process. We
12 identified all of the activities we saw occurring for
13 decommissioning a nuclear reactor. And we discussed
14 it with people: the NRC staff, and the industry. And
15 they helped us define and come up with our list of
16 activities.

17 Also we looked at the environmental
18 issues. And these are some of the typical
19 environmental issues that are addressed in the NEPA
20 process. But, once again, we asked the NRC staff for
21 their input and the industry's input, and we came up
22 with our list of environmental issues we were going to
23 look at the environmental impacts for.

24 From that we came up with a matrix. We
25 called it Tier 1. We looked at all of the

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1 environmental issues at each activity, decommissioning
2 activity, and tried to make an assessment of whether
3 that activity and that issue, if there would be an
4 environmental impact. And, if that was the case, then
5 we put an x in our matrix.

6 If you want to look for a detailed
7 discussion of our approach, that's in Appendix E of
8 the Supplement.

9 Now after we did that we decided that all
10 the nuclear power plants, there's a number of
11 variables between them. We wanted to make sure we
12 assessed those variables, so we put a list of those
13 variables together. And you can see those here: Type
14 and size of plant, decommissioning options shown. And
15 those are all given in Table E-4.

16 We went through the matrix process again,
17 looking at whether the variables would make a change
18 to the environmental impact based on the activity and
19 the environmental issue we were looking at. And we
20 put that on another matrix.

21 From that we came up with our list of
22 generic impacts. And we assessed whether those
23 impacts had a small, moderate, or large significance.

24 And those impacts that weren't generic we
25 considered site specific. And so for those particular

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1 activities, there will need to be a site-specific
2 analysis.

3 And also I'd like to point out at this
4 point in time any activity that we did not address in
5 the Supplement, either because it's a technology that
6 we didn't consider or a technology that may come down
7 the road, those activities will need to have a
8 site-specific analysis. We tried to be all inclusive
9 with the current technology, but we know things will
10 continue to change.

11 So to summarize: We looked at the scope;
12 we put our Tier 1 matrix together. We did a fine tune
13 on that, looking at the variability of the plants.
14 And then we came up with our outcomes. That was our
15 goal, to come up with those activities and issues that
16 were considered generic and those that were considered
17 site specific.

18 Now where did we get the data that we
19 used. This was a very important part of the task.
20 And my team and I, we did a very exhaustive literature
21 search. And then we made trips to a number of
22 decommissioning nuclear plants, ones that we
23 considered kind of covered the gamut of the
24 decommissioning experience. And my team and I went
25 out and we talked to the licensees and we collected

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1 data.

2 And for those sites that -- since we
3 couldn't go to all the plants, we requested that those
4 sites that we didn't visit provide us with additional
5 data. And most of those plants did. And so we had a
6 number of facilities with actual decommissioning
7 experience and data that we used in our evaluation.

8 So let me close with talking just briefly
9 about the findings.

10 I believe in your handout, hopefully you
11 got -- this is the table that's in the Supplement, and
12 that was supposed to be handed out with the visuals.

13 We looked at -- we determined generically
14 that these issues, Water Use and Quality, Air Quality,
15 Ecology, Human Health, Transportation, Socioeconomics,
16 Postulated Accidents, Aesthetics and Noise, and Land
17 Use -- could all be considered generic, those
18 activities under those issues.

19 And for most of them you will see that we
20 said the impact was small.

21 Now for Socioeconomics and Postulated
22 Accidents, you will see that we have "SMALL, MODERATE
23 or LARGE."

24 In this case what we have is a number of
25 items under each issue. And if you've got that table

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1 that summarizes the -- I'm sorry -- the table that
2 summarizes our findings, you will see that in those
3 issues under Socioeconomics, where there's -- I think
4 there were six different issues, some of those had a
5 small impact, some of them had a moderate, and some of
6 them had a large.

7 And when you look in Chapter 4 of the
8 document, it defines what small, moderate, and large
9 for each one of those areas meant. And the same is
10 true for Postulated Accidents.

11 These are the site-specific areas: Land
12 Use; Aquatic and Terrestrial Ecology; Threatened and
13 Endangered Species; Environmental Justice; and
14 Cultural and Historical Resources.

15 Now for Land Use, Aquatic and Terrestrial
16 Ecology, and Cultural and Historical Resources, not
17 all of the aspects were site specific. There's only
18 certain cases when a site-specific analysis would be
19 needed, and we've got that written here.

20 For Land Use it's offsite activities that
21 require major transportation upgrades.

22 Aquatic and Terrestrial Ecology, it's
23 similar, activities that occur outside of the
24 previously-disturbed areas. And there's no recent
25 assessment.

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1 And the same thing for Cultural and
2 Historical Resources, activities outside boundaries
3 that had previously been disturbed would require
4 site-specific analysis.

5 For Threatened and Endangered Species and
6 Environmental Justice, those two issues require
7 site-specific analysis.

8 And with that I will turn it back over to
9 Chip for a minute. And then if you have any
10 questions, I'll be glad to answer them.

11 MR. CAMERON: I just want to point out to
12 everyone that the comment period for written comments
13 is open until the end of the year, December 31st.
14 They can be submitted to the Rules and Directives
15 Branch. They can be submitted to the website address
16 up there. And I think you all have this in your
17 materials.

18 And Dino Scaletti, as I mentioned earlier,
19 is a Project Manager. We also have Mike Masnik here.
20 Feel free to contact them with any questions.

21 I think that we can go out to you for
22 discussion now. We don't need to necessarily limit it
23 to questions. Any questions or comments for Eva or
24 any of the NRC staff on this.

25 And, Jackie, if you could just give us

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1 your name and affiliation.

2 MS. CABASSO: My name is Jackie Cabasso.
3 I'm the Executive Director of the Western States Legal
4 Foundation.

5 And I have a question for Eva which is
6 that in reaching your findings about these impacts,
7 these environmental impacts, the generic issues and
8 impacts, I'm wondering what the baseline you were
9 using was to measure those impacts against.

10 In other words, were you comparing the
11 impacts to the site before the nuclear facility was
12 built or during its peak operating period? And in
13 that case were the impacts considered cumulative or
14 standalone?

15 MS. HICKEY: Okay. Let me make sure I
16 understand your question. You want to know what the
17 baseline was that we were evaluating against --

18 MS. CABASSO: Um-hum.

19 MS. HICKEY: -- and then whether we looked
20 at the impacts cumulatively.

21 MS. CABASSO: Um-hum.

22 MS. HICKEY: What we were comparing
23 against was, we would look at the impacts that were
24 identified in any previously-written environmental
25 impact statements, final environmental statements that

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1 the licensee had published, and any other
2 environmental assessment that had been conducted
3 during the operation.

4 So we were weren't necessarily looking at
5 the impact; we were looking at the way the impacts
6 might change from during operation, not necessarily
7 from the way the plant was prior to operation. So we
8 were comparing those impacts with other environmental
9 impact statements that had previously been written.

10 And, yes, we did look at cumulative
11 impacts.

12 MS. CABASSO: Now just could you elaborate
13 on that a little bit? Because what I was asking you
14 was then cumulative impacts in terms of the plant
15 during its operating period with the decommissioning
16 activities added onto it, or do you mean something
17 else?

18 MS. HICKEY: Well, we looked at it in a
19 variety of ways. We would look at whether the impacts
20 from all of the activities -- well, okay. The
21 radiological was kind of an easy one to establish.
22 The impacts from all of the activities individually
23 and then how cumulatively the radiological impact to
24 the environment would end up.

25 We also looked at them across the issues,

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1 so we would look at activities -- at an activity and
2 see -- I'm sorry. I'm having a hard time describing
3 this. But we would look at them from -- at an
4 activity and then look at water quality and how water
5 quality might impact potentially air quality or any of
6 the other issues. So from that perspective we looked
7 at it cumulatively across all the issues.

8 And then, like I said, we looked at the
9 impacts from the environmental statements that had
10 previously been written and how the environment might
11 change from that point in time.

12 Do you have any other -- okay.

13 MS. CABASSO: Could I? While I have the
14 microphone, this is just an out-of-left-field
15 question, but there's one -- on the handout for the
16 viewgraphs, there's one sort of orphan at the end
17 which --

18 MS. HICKEY: Oh, yes. Thank you for
19 bringing that up.

20 MS. CABASSO: -- and I wondered if
21 somebody was going to talk about that.

22 MS. HICKEY: Yeah, I appreciate you
23 bringing that up.

24 When we had our scoping meetings we talked
25 a lot about the different options of decommissioning

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1 that are used. And I just felt like that -- even
2 though I didn't want to go into that, I wanted to give
3 that information and have it handy in case anybody
4 brought up questions that related specifically to the
5 option, SAFSTOR, DECON, or ENTOMB. And so that's --
6 yeah, that's an orphan. Thank you.

7 MS. CABASSO: Well, I would appreciate it
8 if you would just -- I was at the scoping meetings
9 when those came up -- or the scoping meeting when that
10 came up, but I'd appreciate a little review.

11 MS. HICKEY: Oh, okay.

12 MS. CABASSO: Yes, my colleague would.

13 MS. HICKEY: Let's do that then.

14 Okay. There are three options for
15 decommissioning that NRC has described. And one of
16 the things I'd like to point out -- well, let me
17 discuss them separately.

18 DECON is an option where the plant would
19 shut down and immediately start the decommissioning
20 activities and would complete decommissioning in, say,
21 five to ten years.

22 SAFSTOR is an option where the plant would
23 shut down and then wait some period of time before it
24 completes the decontamination and decommissioning
25 activities in order -- well, there's a number of

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1 reasons, but it's typically to let radioactive decay
2 occur. But there can be other issues, too.

3 And then ENTOMB is an option where the
4 plant would shut down, go through some level of
5 decontamination, and then be put in a long-term -- a
6 stable environment, but -- and then it would have
7 restricted access.

8 Now the way the decommissioning experience
9 has gone is most plants have not -- and there's no
10 plants currently, no power reactors currently doing
11 ENTOMB. But most of the plants have not used just
12 DECON or SAFSTOR.

13 So what we've found is that a plant may
14 shut down and wait three to five years for either
15 decay or some other reason, and then -- and that would
16 be a short SAFSTOR period -- and then they'll go back
17 and do their final decontamination and decommissioning
18 activities.

19 So what we're seeing is that most plants
20 are combining the two DECON and SAFSTOR options.

21 MR. CAMERON: Since we are in California,
22 is it possible, Eva, for you or one of the NRC staff
23 to perhaps just give us a quick summary of what
24 nuclear power plants in California, what stage of
25 decommissioning they're in, what options they have

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1 selected?

2 MS. HICKEY: Okay. Yeah. Rancho Seco
3 started out, they were in SAFSTOR I think for about
4 ten years. I can't remember. But they've now started
5 doing some incremental decontamination. And I think
6 now they've actually gone into the actual phase of
7 decontamination and their decommissioning activities.
8 I think that's true.

9 Humboldt Bay has been in SAFSTOR for many
10 years. They came out and did some activities,
11 removing a stack. And I think you're still in
12 SAFSTOR. That's correct, right? Okay.

13 And then the other plant, San Onofre 1,
14 was in SAFSTOR for a number of years. And now they
15 are doing activity decommissioning, decontamination
16 and decommissioning.

17 I think Mike has something he wants to
18 say.

19 MR. CAMERON: Mike.

20 DR. MASNIK: Yeah. Mike Masnik, NRC.

21 The other thing that I just wanted to
22 stress is that the regulations state that the licensee
23 has 60 years to decommission the plant. The
24 regulations don't specify how they do the
25 decommissioning.

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1 And of course when we did the 1988 GEIS we
2 anticipated that a licensee would pick either DECON or
3 SAFSTOR. We didn't have much experience back then on
4 precisely which way they would go.

5 And what we found, as Eva said, is that,
6 depending on a number of issues: Availability of
7 places to dispose of the waste; funding; workforce, at
8 times they'll be actively dismantling the plant and at
9 times they'll put the plant in storage, which
10 according to our regulations is just fine as long as
11 at the end of 60 years they are, in fact,
12 decommissioned.

13 MR. CAMERON: Thank you, Mike.

14 MS. HICKEY: Do you have any more specific
15 questions? Did I cover what you were interested in?
16 In looking at the options, do you have...

17 MS. CABASSO: (Nods head.)

18 MS. HICKEY: Okay.

19 MR. CAMERON: And I guess just to make
20 sure -- well, let's -- if you could just give us your
21 name, sir?

22 MR. NESBITT: Sure. I am Dale Nesbitt.
23 I am on the Board of Western States Legal Foundation,
24 also active with Peace Action, and a retired staff
25 engineer from Lawrence Berkeley Laboratory.

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1 I would like to have you expand somewhat
2 on your definition of "small," "moderate," and "large"
3 at this moment. I know it's in Chapter 4, which I
4 haven't read yet. Maybe it's all there. But why
5 don't you take the opportunity to expand on that?

6 That to me is a very untechnical term.

7 MS. HICKEY: Yes. I agree. And that's
8 why we tried to give some definition in the document.

9 In Chapter 1, on page 1-8, we give the
10 Council on Environmental Quality's definitions for
11 "small," "moderate," and "large." And this is what we
12 based our analysis on.

13 "Small" pretty much means that there's no
14 detectable, observable changes to the environment from
15 the activity in the issue that we evaluated.

16 "Moderate" would mean that impacts are
17 sufficient to alter noticeably but not destabilize the
18 attributes of the resource.

19 And then "large" would be that there would
20 be a noticeable change to the resource.

21 I know that doesn't sound very specific,
22 but back in Chapter 4, for every issue that we
23 evaluated, we tried to characterize that.

24 I know the Socioeconomics is pretty well
25 defined because those are areas where we look at the

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1 same sorts of issues for other environmental analyses
2 that we've done. So if you take a look there, you may
3 see the specific criteria that we used.

4 And, Mike, maybe if you could talk a
5 little bit about the Terrestrial and the criteria, how
6 you did your analysis for the Terrestrial Ecology.

7 MR. CAMERON: And Mike give us your full
8 name and affiliation, please.

9 MR. SACKSCHEWSKY: Mike Sackschewsky,
10 PNNL.

11 I prepared the Terrestrial Ecology
12 sections. In that case and for every case for each
13 issue, we would define what we mean by "small,"
14 "medium," and "large" impacts.

15 In the case of Terrestrial Ecology, a
16 small impact is one basically that you would not be
17 able to detect any changes in the local plant, or
18 animal populations, or community structure, or
19 ecological functioning in the vicinity of the
20 facility.

21 A moderate impact would be one that has
22 some detectable changes in one of those factors, but
23 not enough to drastically alter the functioning of it.
24 You could see it, but they're still functioning
25 normally.

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1 And then a large impact would be one
2 that's causing a dramatic change in the function of
3 the plant, plant/animal populations or ecological
4 functions.

5 MR. CAMERON: Dale, do you have a follow
6 up on that or... Let me get you.

7 MR. NESBITT: Well, I understand what he
8 said. That's helpful. I'd have to go into more
9 detail. But it seems a bit strange to me that the
10 majority of the things are defined as "small."

11 With my experience with radiation I would
12 not think that most of them would end up being small,
13 but that often comes down to a matter of scientific
14 debate and opinions.

15 MR. CAMERON: To just follow up on that,
16 perhaps it might be useful for people to actually get
17 an idea of what the implications of this Generic
18 Environmental Impact Statement are.

19 If you took an impact that was labeled as
20 "generic," can you give us an example of how would a
21 licensee who was preparing an environmental report for
22 decommissioning, how would one of those generic
23 impacts be considered in their environmental report?

24 I just want to make sure that people know
25 what the implications of labeling an impact as generic

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1 is in terms of the decommissioning process.

2 Is that clear, Eva?

3 MS. HICKEY: Well, I guess, let me give an
4 example that I think help defines it. And the
5 radiological examples to me are the easiest ones.

6 When a plant determines their activities
7 and how they're going to decommission the plant, they
8 do an assessment of the dose to the workers from all
9 the activities.

10 One plant in particular that we looked at
11 determined that they could not meet the guidelines in
12 the original GEIS, the 1988 NUREG-0586, using the
13 methods that they were going to use. So they did a
14 chemical decontamination of their facility in order to
15 bring the doses down so they could be within the GEIS,
16 within the envelope of the GEIS.

17 Now they didn't necessarily have to do
18 that, but what they would have had to do is then a
19 separate analysis in order to explain why their doses
20 were outside of those bounds.

21 So I hope that kind of characterizes. If
22 the licensee looks at an activity and they fall within
23 the boundary in that activity, they don't have to do
24 any additional analysis. If they are outside the
25 boundary, outside the envelope on that particular

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1 activity, then they'll have to do a site-specific
2 analysis.

3 MR. CAMERON: So that they definitely have
4 to take a look at each particular type of impact to
5 see whether they're within the generic bounds that
6 this is establishing.

7 MS. HICKEY: Right. Right.

8 Questions.

9 MR. CAMERON: Then maybe we'll have some
10 more information from the licensee on this.

11 MR. SOKOLSKY: David Sokolsky again with
12 the Humboldt Bay Power Plant. And I don't have more
13 information, but I have more questions.

14 I'm a little confused because if a
15 licensee is outside the bounds or in an area that is
16 beyond what has been previously reviewed, we're
17 required to submit a licensee amendment request.

18 MS. HICKEY: That's --

19 MR. SOKOLSKY: Now I'm confused, since
20 you've got, for these different criteria, a small
21 impact, and a moderate impact, and a large impact,
22 what is the bounds?

23 MS. HICKEY: Okay. If we've defined
24 something, an activity as generic, and the
25 significance is moderate, that's our generic

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1 assessment of it. It doesn't mean that you need to
2 make the impact small. Is that answering your
3 question?

4 What we're saying is we expect that impact
5 to be moderate.

6 MR. SOKOLSKY: Well, for example, with
7 staffing and its impact on population, you give
8 percentages that would result in either a small, a
9 moderate, or a large impact --

10 MS. HICKEY: Right.

11 MR. SOKOLSKY: -- on the area's
12 population. So if in our situation we have a large
13 impact or a moderate impact, do we need to submit a
14 license amendment request? Do we need prior NRC
15 approval on this?

16 MS. HICKEY: If, for that particular
17 issue, that particular aspect of the socioeconomic
18 issue, if it states that the impact is moderate and
19 you're small or moderate, then it's fine. If you're
20 large, we've determined that that's not generic.

21 So you need to -- yes.

22 MR. SOKOLSKY: That makes sense, but I
23 didn't --

24 MS. HICKEY: Okay.

25 MR. SOKOLSKY: -- and I haven't read this

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1 thoroughly. Is that criteria described in here or
2 defined in here?

3 MS. HICKEY: You know, I think that's a
4 good -- okay, Mike.

5 MR. CAMERON: Let's get this on the
6 record. I think that some of these questions are
7 raising what are actually comments. And I just want
8 to assure people that these will be treated as
9 comments. But I think what we're trying to do here is
10 to figure out what's the implications of a generic
11 finding, particularly when those generic findings
12 might be stated in terms of "small" or "moderate."

13 MS. HICKEY: And one of the things that
14 I'm really interested in comments from the public is
15 -- we've tried to make this clear. And if we haven't
16 presented it clearly, that's what we want to know, so
17 we can go back and try to redefine it.

18 MR. CAMERON: Okay, Mike.

19 MR. SACKSCHEWSKY: Mike Sackschewsky,
20 PNNL.

21 In partial answer to your question, the
22 definition of a "generic" impact also includes --
23 well, it has the three aspects

24 One, it's applicable to a number of sites.

25 Two, it has the same level of impact at

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1 each site. And then,

2 Three, after looking at it, it was
3 determined that available mitigation measures were
4 either technically infeasible or economically
5 infeasible. And so therefore they're not warranted to
6 mitigate the effects of those impacts.

7 So even if the impact is large, then it's
8 determined that there's nothing that can be really
9 done about that, and you're decommissioning the plant
10 anyway. So that's partially what's answering your
11 question.

12 And there are just a couple of issues
13 where there are actually more than one level of
14 impact, but that's for specific cases. And in that
15 case you just have to determine which situation meets
16 your case, you know, the population percentage, or
17 whatever.

18 MR. CAMERON: Let me see if Dino or Mike
19 want to offer anything more on this explanation, and
20 then we'll go to Steve Lewis.

21 Dino, anything else?

22 MR. SCALETTI: No.

23 MR. CAMERON: Mike?

24 All right. Let's go to Steve, and just
25 tell us your affiliation, Steve.

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1 MR. LEWIS: Steve Lewis, Office of General
2 Counsel at the NRC.

3 My perspective is of course from the point
4 of view of the regulations. It's not that the staff
5 doesn't look at it that way, but I spend sleepless
6 nights thinking about it that way.

7 I look at it from the point of view that
8 under 5082, as amended in 1996, --

9 MR. CAMERON: Can you just -- I'm not sure
10 everybody knows what 5082 is.

11 MR. LEWIS: In 1996 we updated our
12 regulations on decommissioning of nuclear power
13 plants. And the process that we follow is pretty
14 exhaustively described in the GEIS Supplement that
15 you'll be reviewing. And that is set forth in 5082.

16 And what that provides is that each
17 licensee has to look at the existing environmental
18 envelope, is sort of a term we put on it. And that
19 environmental envelope is being updated in large part
20 by this Supplement to the GEIS.

21 So a licensee now has an updated
22 environmental envelope to look at. And I think that
23 a licensee would then address its particular
24 circumstances against that updated environmental
25 envelope.

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1 MR. CAMERON: Okay. Thank you very much,
2 Steve.

3 Do we have other questions or comments on
4 all of this?

5 Okay. Eva, do you have anything more?

6 MS. HICKEY: No. We welcome your
7 comments. If you want to discuss anything after this,
8 we'd be glad to do that. If you want to offer written
9 comments, we'd be glad to take those.

10 MR. CAMERON: Okay. Thank you very much,
11 Eva.

12 Since the NRC is here I would ask -- well,
13 first of all, I would ask if anybody wants to make a
14 formal comment on the record here tonight.

15 And, secondly, I would just, since we are
16 here, are there any other concerns that people would
17 like to bring to the attention of the NRC. And let's
18 go to --

19 Patricia, if you could just give us your
20 name and affiliation for the record.

21 MS. OLSON: Chip, I wanted to make a
22 formal comment.

23 MR. CAMERON: Oh, good. You may be more
24 comfortable up there, but you can --

25 Oh, yeah, absolutely.

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1 MS. OLSON: Great. My name is Patricia
2 Olson, and I'm with TriValley CAREs in Livermore,
3 California. We appreciate the opportunity to provide
4 input at the hearing, but we do support holding the
5 hearings in reactor communities in California.

6 We're concerned that the use of the
7 proceeding may be used to eliminate site-specific
8 evaluation of local concerns. And our concern is the
9 right of local residents will be preempted from
10 raising concerns during the license termination plan
11 review.

12 Now I've talked earlier with people about
13 the scope of this hearing and to what extent the
14 radioactive contamination levels that are permitted to
15 be released from regulatory control for
16 decommissioning are being used to release radioactive
17 materials routinely.

18 From what I understand, this is not the
19 case. But if that were in fact true, we would oppose
20 any release of contaminated materials during
21 decommissioning or other times.

22 I think the questions about the small,
23 moderate, and large significant levels have already
24 been discussed. So that's all. Thank you.

25 MR. CAMERON: Thank you very much,

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1 Patricia.

2 Dale.

3 MR. NESBITT: Okay. I had not prepared
4 anything beforehand, so this will be ad lib. Just to
5 add to the little background, yes, I am a mechanical
6 engineer retired from Lawrence Berkeley Laboratory,
7 where I had a great deal of contacts with various
8 radioactive concerns.

9 In addition to that, it just happens that
10 my oldest brother, who's 15, 16 years older than I am,
11 is retired from the Atomic Energy Commission, where he
12 was in charge of the radioactive waste facility at
13 Hanford.

14 I have another brother who spent a good
15 share of his career designing nuclear power plants.

16 Now when I finished the university I was
17 certainly one of those that was convinced -- this was
18 back in the '50s, early '50s -- that nuclear power was
19 the wave of the future and indeed that would produce
20 power so cheap we wouldn't have to meter it, and all
21 that stuff.

22 Well, slowly over the years, and part of
23 it from what I've learned from my oldest brother, I've
24 started to learn more and more about some of the bad
25 sides of nuclear power; and over the years became

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1 concerned of course about the nuclear weapons.

2 But what I want to address here, and it's
3 a question, I don't have any doubt that on a technical
4 level the work that's represented in this is very
5 thorough and very conscientious. I have been
6 responsible for similar things; I know how hard it is.

7 But I think that there is an overall
8 concern, which I know that this doesn't address, and
9 that is the vulnerability of nuclear power plants to
10 various acts of terrorists. And I don't think it
11 should be ignored, and I think that we should be very
12 concerned about it.

13 Now I would be -- just as background,
14 before September 11th, I probably felt that the
15 SAFSTOR approach was one of the best things, to let
16 them sit for 10, 20 years, and let the radioactive
17 level decrease significantly before you try to
18 disperse it.

19 I no longer think that. And yet I just
20 heard, well, the licensees have 60 years to decide,
21 and they can do anything they want. And I don't think
22 that that's a danger that the public should put up
23 with.

24 And I also feel over the years, and one of
25 my brothers also spent a great deal -- he's retired

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1 from your facility at Hanford, and he worked on the
2 vitrification process. And so I also know quite a bit
3 about that.

4 But my concern here is I don't think
5 there's any good way to treat the long-term storage of
6 radioactive waste. I don't think Yucca Mountain is
7 the answer, for darn sure, for various reasons.

8 Also at Lawrence Berkeley Lab the group
9 that's the Earth science group has done the study on
10 groundwater transportation. And I know from some of
11 my associates there that they think it is not a
12 satisfactory location for long-term storage.

13 But now the point I want to make, that the
14 danger to the public from a terrorist act is a
15 function of the total level of radiation that exists
16 on one given site. We cannot do anything about the
17 total level of radiation in a global sense, but
18 through government regulations we could do something
19 about the amount of radioactive material that is
20 stored at any one location.

21 And I believe that that's where the very
22 concerted effort of the Nuclear Regulatory Commission
23 should be in the immediate future. And I'm not so
24 much concerned about this document as it stands, but
25 I am concerned about the overall global effects.

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1 Thank you.

2 MR. CAMERON: Thank you very much, Mr.
3 Nesbitt.

4 Michael, do you have anything you want to
5 add on the terrorism issue at this point?

6 Okay. Let's go to Barry. Give us your
7 name and affiliation.

8 MR. ZALCMAN: My name is Barry Zalzman.
9 I'm the Section Chief of the Environmental Section,
10 overseeing a lot of this work.

11 Just to give you a little reaction on the
12 terrorism issue. This is a very serious issue that
13 the Agency has taken some actions on already. The
14 events of September 11th were horrific. We understand
15 that it's not just the Nuclear Regulatory Commission
16 and the structures that we deal with but the entire
17 nation's infrastructure that has gone under some
18 significant review in the past several months.

19 The Agency is doing some things in this
20 area. One of the things that you may not be aware of,
21 but the chairman and the commissioners have requested
22 a top-down review of the entire regulatory fabric
23 dealing with security-type issues. And this is part
24 of what our response is.

25 We've gone into a heightened alert status.

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1 Activities have changed around nuclear power plants,
2 as they have for many of the infrastructure issues
3 across the country. And from the actions not only on
4 the part of our licensees but also the Agency, our
5 Operation Center is manned continuously. And we've
6 gone into a higher level of manning not only in
7 Headquarters but also in our Regional Offices as well.

8 Let me address a couple of other points
9 you had raised.

10 One of the important things to realize is
11 this a public meeting. It's not a hearing. It's a
12 different issue inside the Agency. So that was the
13 earlier point. But it's our attempt to reach out to
14 members of the public, specifically and narrowly
15 focused on this commodity that we've worked on, this
16 Generic Environmental Impact Statement Supplement.

17 There are other forums that the Agency
18 makes available to the public to engage them on
19 regulatory infrastructure issues, such as our
20 regulatory process, and seeks public engagement on
21 issues that may exist at a specific nuclear facility,
22 issues that may exist within our regulatory fabric
23 itself.

24 If there are issues where the public wants
25 the Agency to consider a change in our regulatory

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1 process, there is a forum for that. And I would
2 encourage you.

3 I don't think we've brought anything on
4 the petition process. But if you'd like, we can
5 provide you with information as to how you go about
6 raising issues where you have a concern like this to
7 the Agency so we can put it into the right process.

8 This document is narrowly scoped. And
9 this is the forum that we reach out to engage the
10 public on. This is not a required meeting.

11 We think it's very important to engage you
12 in dialogue on issues like this, changes to the way we
13 do our work. And Mr. Lewis raised earlier, he worries
14 about the regulatory processes. A lot of us worry
15 about that. That is our mission. That is our
16 obligation. But within the context of change the
17 events of September 11th are hitting home. We are
18 concerned about it. My expectation is that you will
19 see, if you pay attention to what the Agency is doing
20 in the security area, you will be seeing some changes.
21 It's a matter of time.

22 Thank you.

23 MR. CAMERON: Thank you very much, Barry.

24 Let me see if anybody else --

25 Mr. Nesbitt.

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1 MR. NESBITT: As a response to that, and
2 whether or not it applies to this document at all, I
3 realize it was outside of what was scoped for this
4 particular document, I do not think it's outside of
5 the scope of this particular document to have some
6 regulations about the speed, let's say, of how the
7 total amount of radiation on a given site was reduced.
8 I think that would be perfectly within the scope of
9 this document.

10 MR. CAMERON: Again, I think you've made
11 that connection for us. And I think Barry was talking
12 in general terms. But I think you did make that
13 connection between the 60 years and the terrorism
14 issue.

15 And it will be duly considered as a
16 comment when the staff evaluates it. So I just want
17 you to be assured of that.

18 Anybody else at this point? Jackie, and
19 then we'll go back to you, Steve. Jackie.

20 MS. CABASSO: Yeah. This is not a formal
21 comment, but just I understand that spent fuel is
22 dealt with in a different GEIS. And I haven't read
23 anything except the Executive Summary of this one so
24 far, so I am partly speaking out of ignorance.

25 But I think I raised this concern during

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1 the scoping. The 60-year period presumes a lot of
2 things.

3 And one of the things it presumes is that
4 there's going to be a viable option for removing the
5 spent fuel from the site. And I'm just wondering if
6 anybody could talk a little bit about the relationship
7 there, because I am one of many people who believe
8 that Yucca Mountain is not a foregone conclusion,
9 although probably that is not your view here, but
10 there is significant opposition to it from some rather
11 more powerful actors than us in the state of Nevada.

12 And, you know, I'm just wondering like
13 what -- you know, if you can talk about that
14 relationship, then what kinds of long-term planning is
15 going on with the NRC in case that 60-year window
16 doesn't work out.

17 MR. CAMERON: Again I guess is there
18 something -- Mike, can you also address, I think
19 Jackie was asking maybe some information about how
20 this document does consider spent fuel storage, either
21 pools or otherwise. But you heard Jackie's question
22 to you.

23 DR. MASNIK: The document actually talks
24 about long-term storage of fuel on the site. It was
25 included in the document, even though technically it

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1 is outside the scope. And we did that because we know
2 that there is a lot of interest in that area,
3 obviously.

4 The history of this is quite interesting.
5 When the Commission first started thinking about
6 decommissioning, it was in the '70s. And the 1988
7 GEIS and the regulations that were passed in 1988
8 presumed at that time that spent fuel wasn't going to
9 be a problem, and it never even addressed it.

10 And the presumption was there because we
11 assumed that there would be a high-level waste
12 repository and the high-level waste would be removed
13 from the site actually during decommission.

14 Well, we all know that didn't happen. And
15 we don't have a high-level waste repository. So what
16 the Agency did was enact some regulations that allowed
17 for interim storage of that spent fuel on the site.

18 Now the regulations allow for wet storage
19 of the fuel in the spent fuel pool. And the
20 Commission has come to the conclusion that that fuel
21 can be safely stored onsite in wet storage for, I
22 believe, 20 years additionally. Is it 30? Well, 30
23 years additionally. Thirty. Thirty? Okay.

24 MR. CAMERON: Forty plus 30.

25 DR. MASNIK: Yes. Additionally, the

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1 Commission enacted some regulations that allowed for
2 dry storage of the fuel onsite. And, in fact, a
3 number of licensees have built these dry-storage
4 facilities, they're called ISFSIs -- it's an acronym
5 -- but basically the fuel is placed in a canister and
6 then placed inside of a concrete overpack and kept
7 onsite.

8 It remains to be seen what will happen
9 with Yucca Mountain. There are some other options
10 that are being explored. There may be some interim
11 surface storage of the fuel as well. I think you
12 probably know about it, but it is a problem and we're
13 wrestling with it.

14 MR. CAMERON: And I believe that the
15 document does talk about the Commission's Waste
16 Confidence Decision. And indeed if Yucca Mountain was
17 not -- if there was no license application for it or
18 if the license was denied, then I think the Commission
19 would have to go back and revisit that Waste
20 Confidence Decision.

21 And let's go to Steve Lewis.

22 MR. LEWIS: Mr. Nesbitt, let me offer an
23 additional --

24 MR. CAMERON: Give us your name and --

25 MR. LEWIS: Steve Lewis, Office of General

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1 Counsel.

2 Mr. Nesbitt, let me try another sort of
3 perspective, to try to respond to your question and
4 maybe the questions of others, too, I think.

5 (Sounds of cheers from neighboring ballroom.)

6 MR. LEWIS: I'm sure that's not for me.

7 Nothing that the Commission is doing
8 nowadays post September 11th of this year is being
9 done in isolation. It's extremely important that we
10 have heard your comment today.

11 And although it's going to fall under the
12 framework of what we have to do with or what we decide
13 to do with respect to this document, other people in
14 the Agency are going to be looking at what we say in
15 this document. And they're going to be thinking about
16 the comments that we received on this document.

17 And those other people are doing a very
18 disciplined review that Barry Zalzman referred to
19 previously, about this top-to-bottom review of our
20 whole regulatory regime in light of what appear to be
21 very changed circumstances, regarding terrorist
22 threats.

23 And what I would encourage you to think of
24 is that your comment is extremely important. It's
25 important for this document. It's also important for

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1 the Commission in general because we are embarked on
2 a really serious and intensive attempt to try to
3 figure out what we need to do in light of the
4 September 11th events.

5 And the last thing I will say is that the
6 direction from the Commission includes that we look at
7 the entirety of what might need to be done, including
8 whether or not we need to propose any legislation;
9 whether or not we need to change our regulations in
10 any way.

11 So it's conceivable that although this
12 particular document is dealing with 5082 as it
13 currently exists, it may well be that the kinds of
14 comments that you have offered today and that many
15 other people are offering to us in other forums may
16 cause us to change our regulations in a number of
17 respects, including possibly 5082.

18 MR. CAMERON: Okay. Thanks, Steve.

19 Stu, do you have something you wanted to
20 add? And please give us your name.

21 MR. BROWN: My name is Stu Brown. I'm
22 with the Office of Nuclear Materials Safety and
23 Safeguards.

24 I just wanted to address two items. The
25 first one, I guess a comment was made about preserving

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1 hearing rights during the license termination plan
2 submittal. The point is that this document does not
3 do anything to impact those hearing rights at that
4 time in the process.

5 The other comment that was made, as an
6 example, the concern about how spent fuel would be
7 handled relative to this document. I wanted to
8 provide an example, the Fort Saint Vrain Facility.

9 The NRC granted that licensee a Part 72
10 license where they were able to remove the fuel, put
11 it into the independent spent fuel storage
12 installation, complete decommissioning of the Part 50
13 license, and actually terminate that license. And
14 that's what this document would cover.

15 Again, I just wanted to provide that for
16 clarification. Thank you.

17 MR. CAMERON: Okay. We want to thank all
18 of you for your tolerance of the noise --

19 MR. LEWIS: Can we join the party?

20 MR. CAMERON: I think so. I'm afraid that
21 -- or was afraid that -- we're safe in here with the
22 doors closed, but I'm sorry for the competition.

23 Do we have any further comments at this
24 point?

25 I would just encourage you, it may be

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1 easier to have some informal discussions with the
2 staff after the meeting is closed, but I don't want to
3 close it off until we see if there is any other
4 comments or questions that we have.

5 Jackie.

6 MS. CABASSO: Just a general comment which
7 is that I want to thank the NRC and encourage the NRC
8 to push for more openness right now with the public,
9 as your last comment suggested, rather than less,
10 which is what's happening with some of the other
11 agencies.

12 I was on a conference call today with some
13 people who are -- other people working on Department
14 of Energy facilities, where we've had a real problem
15 with a shutdown of information.

16 And it was pointed out that, in a number
17 of specific cases that we can document, public input
18 was critical in actually significantly improving
19 public health and safety because of discrepancies that
20 were found in documents or perspectives that were not
21 being recognized by the agency.

22 So I was very encouraged by what I heard
23 tonight here. And I just want to really encourage the
24 NRC to fight that trend and to talk to us and solicit
25 ideas from the public.

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1 And maybe some of the things that we've
2 been saying, like there shouldn't be anymore nuclear
3 power because we don't know what to do with the waste,
4 is becoming a more salient point now that needs to be
5 really looked at from a fresh perspective. So thank
6 you.

7 MR. CAMERON: And can we make sure that
8 that particular comment is passed along, too, to the
9 people at the NRC who are dealing with this issue of
10 how much information should be available, so that it
11 gets into a broader...?

12 Dino, Barry, you're shaking your heads
13 yes. Okay, good. Good.

14 Patricia, anything else?

15 MS. OLSON: No.

16 MR. CAMERON: Thank you.

17 Mr. Nesbitt? You're fine.

18 Anybody? Kathy, anybody?

19 Okay. Well, again -- the EPA? No. All
20 right.

21 Again, thank you very much for being here
22 tonight. And one thing I forgot to mention about the
23 so-called feedback form. It's an evaluation form of
24 the meeting. It already has a -- it's franked
25 already, if you want to put it in the mail. In other

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1 words, you don't have to fill it out tonight and leave
2 it with us if you don't have time.

3 And, again, thank you. Thank you, all.
4 I would encourage you to contact any of the NRC staff
5 that are here, and we'll always be glad to hear from
6 you.

7 And December 31st, written comments due on
8 this particular Draft Supplemental GEIS. And thank
9 you.

10 (Whereupon, the meeting was adjourned at
11 8:36 p.m. on December 4, 2001.)

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