

Note: During the January 31, 2012 webinar on the draft report entitled “Background and Preliminary Assumptions for an Environmental Impact Statement—Long-Term Waste Confidence Update,” time did not allow the NRC staff to respond to all of the written questions that were submitted. NRC staff responses to the unanswered questions are appended to the webinar transcript that follows.

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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

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WASTE CONFIDENCE WEBINAR

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TUESDAY,

JANUARY 31, 2012

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The webinar was convened at 2:00 p.m., Lisa Janairo, The Council of State Governments, Midwestern Office, presiding.

PRESENT:

LISA JANAIRO, The Council of State Governments,
Midwestern Office

CHRISTINE PINEDA, NRC, Office of Nuclear Material
Safety and Safeguards

JAMES RUBENSTONE, NRC, Office of Nuclear Material
Safety and Safeguards

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

(2:00 p.m.)

MS. JANAIRO: Welcome to this public webinar on waste confidence, co-hosted by the U.S. Nuclear Regulatory Commission and the Council of State Governments, Midwestern Office. I'm Lisa Janairo, with the Council of State Governments, and I'm managing the logistics for this webinar.

Here's the agenda for our session today. We'll start with a few ground rules and housekeeping items before we turn to the presentation. Following the presentation, we will have time for stakeholder questions and feedback, and we'll be wrapping up by 3:30 p.m. Eastern Time.

Turning now to housekeeping, this webinar is being recorded. The slides from the presentation, the recording, and a transcript will be available on the NRC's public meetings page next month. Goto webinar will also have a recording archived on its Web site, and you'll all receive the link to that recording in a follow-up message that'll go out later this week.

To reduce the possibility of feedback or other external noise, all the lines are in listen-only mode right now and they'll stay that way while we're

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1 hearing from our speakers. After Christine Pineda's
2 presentation is complete, we'll take questions in the
3 order received.

4 Right now we have over 100 people on the
5 line, so please to try to limit questions to those of
6 a clarifying nature so that we can get to as many
7 participants as possible. You have two options for
8 asking questions, you can type them using the Goto
9 webinar questions pane, or you can raise your hand and
10 I'll unmute your line.

11 Note that clicking on the hand button
12 toggles it on and off, and if you click the button,
13 you should see an indicator that your hand is raised.

14 If you click on the button again, your hand will no
15 longer be raised.

16 Using your microphone and speakers is one
17 of the two options for the audio component. If you're
18 using this option, please make sure to test your audio
19 settings before raising your hand to ask a question.
20 If you look at the audio pane in Goto webinar, there's
21 a link for testing your microphone and speakers.

22 If your microphone doesn't work, you'll
23 need to type your question or choose the option to
24 dial-in using your telephone. To help ensure high
25 audio quality on the line today, and on the recording,

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1 if you do ask a question, please refrain from using a
2 speakerphone.

3 And finally, after the webinar, a brief
4 survey will pop up. Please take the time to fill out
5 the survey so that we can get feedback to help improve
6 these webinars.

7 I'm going to turn the floor over now to
8 James Rubenstone with the NRC to explain the purpose
9 of today's webinar and to introduce our speaker, Jim?

10 MR. RUBENSTONE: Thank you, Lisa, can
11 everyone hear me?

12 MS. JANAIRO: You might want to speak up
13 just a little bit, Jim.

14 MR. RUBENSTONE: Okay. Thank you, Lisa,
15 and welcome to everyone who is in attendance on this
16 webinar. If you have participated in some of our
17 previous meetings and webinars on this topic, you know
18 that this is the beginning of a multi-year project
19 that NRC staff is doing to examine updates to the
20 waste confidence decision, and as part of that, to
21 produce an environmental impact statement examining
22 the impacts of possible long-term dry storage of spent
23 nuclear fuel and high-level waste.

24 The main purpose of today's webinar is to
25 walk through a report that was issued by NRC at the

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1 very end of December of last year that gives some
2 background and preliminary assumptions for the EIS,
3 and our speaker today will be Christine Pineda, who
4 will go through the report, discuss some of the
5 assumptions and background that's involved there, and
6 then we'll open it up for questions when we're done.

7 And I certainly appreciate all the people
8 on the line, but keep in mind, given the number of
9 attendees, that if you would like to ask a clarifying
10 question, there may be a large number of people with
11 questions and we want to try to get through as many as
12 we can during this period.

13 And Christine will fill you in on some
14 other ways in which we can take questions and comments
15 on the report and other activities. So I'll turn it
16 now to Christine.

17 MS. PINEDA: Thanks, Jim. Can you tell me
18 if you can hear me okay?

19 MR. RUBENSTONE: Just fine.

20 MS. PINEDA: Okay. Thanks very much to
21 Jim and Lisa. Again, my name is Christine Pineda and
22 I'll be walking through the report that we published
23 in December and that report, as Jim described, is
24 providing our preliminary information, including
25 preliminary scenarios and assumptions, that we are

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1 developing to ultimately develop an EIS for the long-
2 term waste confidence update.

3 And this long-term update, the Commission
4 direct the staff to do this update a couple of years
5 ago now, and the staff, in February of 2011, developed
6 a paper for the Commission providing its plan for
7 developing the EIS, and the report expands on that,
8 and updates some of the assumptions that were provided
9 in that plan.

10 And I know some of you probably attended
11 our public meetings and our webinar that we had in
12 December, but for those who haven't, we have had some
13 previous public meetings in the fall of last year, and
14 we had a webinar in December, talking about our
15 preliminary plans and answering questions.

16 And so if you're interested in learning
17 more about those meetings, our Web page that is on
18 this slide here, this public involvement Web page,
19 contains, sort of, a history of our various meetings,
20 and the meeting summaries, and the slides, for those
21 meetings and the webinar. And the report is also
22 available at that Web site.

23 So the primary purpose of this webinar is
24 to actually answer any clarifying questions that you
25 have about the draft report and the scope of the EIS,

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1 but before that, I'll provide a little bit of
2 background on waste confidence. It won't be as much
3 as we provided in December, and in the meetings, so I
4 can answer questions if needed, and then also to walk
5 through the sections of the report. And the report
6 does contain a more expanded background on waste
7 confidence.

8 And again, the report's available at this
9 Web site that you see on this slide and you can submit
10 comments on the report, and on the project in general,
11 to this address that you see here; it's
12 WCOutreach@nrc.gov.

13 The report is the very first step in the
14 process of doing a long-term update, which will, of
15 course, consist of the draft EIS, and an update to the
16 Waste Confidence Decision, and a possible update to
17 the rule.

18 This report is being done prior to
19 initiating the NEPA process, and I'll talk more about
20 the schedule later, but this is something that we're
21 putting out to make sure that we're covering the
22 significant factors that we would need to consider in
23 an EIS, and to get public feedback on that
24 information.

25 So the report, which I believe you have,

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1 that Lisa sent to you today, the bullets here provide
2 the main sections in the report. It's not every
3 single section listed in the report, but these are the
4 main topics that are covered in the report, and I will
5 generally be talking about all these topics here.

6 So if there's aspects of the report,
7 specific sections that I don't explicitly cover in my
8 talk, of course, you can ask questions about those
9 aspects. But the report provides some background on
10 waste confidence, as I mentioned, and it also
11 discusses the NRC's regulatory role in trying to
12 clarify the NRC's regulatory purpose and the NRC's
13 role with regard to waste confidence.

14 And then it gets into a discussion about
15 what the EIS itself would contain, and discussing the
16 methodology that we propose to use, and the scope of
17 the impacts, and where we would get our information,
18 how we would use quantitative, or qualitative,
19 information, and other sources of information.

20 And it lists our general assumptions that
21 we have made thus far and it describes our general
22 scenarios for comparing the impacts. And then it
23 describes the process, the general schedule out,
24 starting from now until 2019, and the major milestones
25 between now and then, and also briefly discusses some

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1 of the NRC activities that we've had in the past
2 couple of years; early in the past year.

3 The origin of waste confidence, in 1979,
4 the U.S. Court of Appeals for the District of Columbia
5 Circuit required the NRC to make findings, and there
6 were two findings that the NRC had to make. And that
7 was, whether the NRC had reasonable assurance that an
8 offsite disposal solution would be available by the
9 expiration of plants' operating licenses, and if not,
10 another finding about its level of assurance, that
11 spent fuel could be stored safely at the sites beyond
12 the expiration of the operating licenses.

13 In response to the Court's ruling, and
14 also in response to another ongoing proceeding at the
15 NRC, the NRC developed the waste confidence decision,
16 and the rule, first, in 1984. And the decision is
17 composed of five findings and their bases. And the
18 five findings pertain to the feasibility and the
19 safety of spent nuclear fuel and high-level waste
20 storage and disposal.

21 The rule was established to fulfill part
22 of NRC's NEPA obligations when licensing nuclear power
23 plants. And the rule is in NRC's Regulations in 10 CFR
24 Part 51, and that applies to what the NEPA analyses
25 for new dry storage facilities would need to cover

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1 regarding extended storage and states that, because
2 the conclusion is that, for the existing rule that,
3 impacts would not be significant, that those
4 environmental documents do not need to contain site-
5 specific analyses of extended storage beyond licensed
6 life.

7 And the decision those five findings and
8 their bases provide the basis for the rule and, of
9 course, the rule is generic and it applies to all the
10 sites.

11 And just as some background, the state of
12 New York, and other states, filed a lawsuit against
13 NRC concerning the 2010 Waste Confidence Rule and its
14 consideration of environmental impacts.

15 And I should note, I didn't mention
16 earlier, that the decision and Rule were first
17 established in 1984, and they were updated in 1990,
18 and then they were reviewed in 1999, but not updated,
19 and then they were updated again in 2010, and it's
20 this 2010 decision and Rule that are currently being
21 challenged by several states. And so those aspects of
22 the 2010 Rule are not part of today's discussion.

23 Just to give some background and
24 clarification, the NRC is a regulatory agency. We're
25 not a programmatic-type agency, such as EPA or DOE.

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1 Our main purpose is to ensure the safe management of
2 nuclear materials and we do this through our licensing
3 and enforcement processes. We do not manage and
4 propose programs.

5 We regulate storage through a
6 comprehensive program and this is one of our key
7 assumptions in the EIS, that there would be a
8 continued comprehensive program managing the storage
9 of spent nuclear fuel. We're not assuming that
10 storage sites would become de facto disposal sites or
11 would be left in place without continued management.

12 Waste confidence, as I believe I described
13 on the previous slides, conveys the Commission's
14 conclusions that safe storage and disposal are
15 feasible and will be available, and those are
16 expressed in those five findings.

17 Waste confidence is not a regulatory
18 program. It's not meant to make requirements on
19 storage, or storage and disposal, and it does not
20 establish any requirements, and it's not a specific
21 licensing action. It does not apply to any specific
22 plants, but the findings apply generally to all
23 plants. And it's simply the statement of the
24 Commission's assurance about safe storage and
25 disposal.

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1 Concerning the EIS, the proposed scope and
2 methodology, our preliminary assumed storage period
3 would be on the order of 200 years, and that's for the
4 impacts analysis. And that would begin starting about
5 the middle of this century out for 200 years.

6 Our methodology, we are going to,
7 generally, since this is not going to be a site-
8 specific EIS, be making use of developing, what we're
9 calling, composite generic sites. And these will be
10 developed after we review existing current sites, and
11 new proposed sites, and looking at the characteristics
12 of those sites, and the facilities on those sites,
13 identifying patterns and groupings that could then be
14 factored into representative sites.

15 So say we would have 10 or 20 sites that
16 we choose certain characteristics, and we put those
17 into those sites, and they represent a whole group of
18 actual sites. So in that way, it's not going to be a
19 site-specific analysis. And because of that way of
20 developing these generic sites, the impacts,
21 therefore, will not be site-specific, they will be
22 discussed generically.

23 There's going to be some impacts that
24 we'll be able to quantify, such as land use and
25 radiation exposures to workers and the public, and

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1 that kind of thing, but there will be some impacts
2 that we won't be able to quantify. For example,
3 impacts to surface water, or ground water, that are
4 not able to be quantified because those are site-
5 specific impacts.

6 In order to develop our analyses for the
7 impacts, we'll be doing some analyses for those things
8 that we can quantify, but then we will be using, to
9 the extent we can, existing analyses in relevant
10 environmental impact statements developed by the NRC,
11 or other agencies, if they contain information that is
12 current and can be used for these analyses.

13 So when we get into discussions that
14 impact the specific media, or that kind of thing, we
15 will likely be referencing existing analyses and
16 impacts conclusions.

17 To the extent we can, also we'll be taking
18 advantage of ongoing technical activities concerning
19 extended storage and transportation that the NRC is
20 involved in, and that's to support its regulatory
21 program.

22 Currently NRC is identifying what
23 technical information it needs to ensure the safe
24 regulation of spent fuel storage and when that
25 technical information becomes available, it may be

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1 that it can be used in the EIS to help inform the EIS
2 analyses, and that will be several years from now.

3 The one thing I want to note is that the
4 Commission has not determined whether this is a major
5 federal action that would have significant impacts.
6 The 2010 update concluded that there would be no
7 significant impacts from 60 years beyond licensed life
8 storage, but by doing this EIS, we're not necessarily
9 stating that there would be significant impacts.
10 We're doing this EIS at Commission direction because
11 of the public interest in this topic.

12 The report discusses, I believe, it's
13 about nine assumptions, but of course, all throughout
14 the discussion there are assumptions, sort of,
15 embedded in the discussion of the methodology, but
16 I've listed just a few of the major assumptions that
17 are discussed in the report.

18 Nuclear power would continue in the same
19 proportion that it exists in the supply on the
20 electrical grid, like, the supply of electricity
21 today, that is, the proportion of nuclear power would
22 not increase.

23 As I mentioned earlier, storage continues
24 to be a fully regulated activity. There would not be
25 a situation where spent fuel would be stored on a pad

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1 and then, at some point, the Federal Government walks
2 away from it. It will be fully regulated throughout
3 the storage period.

4 All the scenarios include transportation
5 between the sites. So as I'll describe when I discuss
6 the scenarios below, between storage sites and also
7 from the storage sites to a disposal site. So we'll
8 look at the impacts of transportation, but we're not
9 going to be looking at the impacts of disposal itself.

10 We're also assuming that conditions 200
11 years from now for things such as transportation
12 infrastructure, and other things like that, will be
13 the same as it exists currently, because we just can't
14 speculate, when we go that far out, on what kinds of
15 conditions would be there, so we're going to be using
16 current conditions.

17 The preliminary scenarios discussed in the
18 report that we'll be using to develop our impacts
19 analyses, and then compare the impacts, will include
20 continued onsite storage; so 200 years of storage
21 onsite. Storage at a regional facility, so that would
22 include transportation from the plants to two or more
23 regional facilities.

24 Storage at one central location and
25 possibly a combination of one or more of the other

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1 scenarios plus some amount of reprocessing. So spent
2 fuel would be transported to a reprocessing facility,
3 reprocessed, and then the resulting high-level waste
4 would be stored at a co-located storage facility. And
5 the purpose of this scenario is to include high-level
6 waste storage in our impacts analyses.

7 So a general timeline is, in April of this
8 year, we'll finalize this report providing, probably,
9 an appendix that will discuss the types of public
10 comments we receive and how we address them in the
11 report.

12 And then over the next year, we'll
13 continue developing preliminary information for the
14 EIS scope and preparing, also, to do our public
15 scoping under NEPA, under the National Environmental
16 Policy Act, and the public scoping would probably
17 start in the summer or fall of 2013.

18 Between 2013 and 2016, we will develop the
19 draft EIS, and as I mentioned, a possible draft
20 decision, and a possible proposed rule. I should
21 mention also that, after we have our scoping process
22 in 2013, we'll develop, what's called, a Scoping
23 Summary Report where we'll, again, describe the kinds
24 of input we receive concerning the EIS scope, and then
25 what we determined should be the disposition of that

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1 input regarding the EIS scope.

2 And I also should mention that, at the
3 time we start the scoping process, we plan to have
4 more documents for the public to review concerning the
5 EIS scope. So maybe some more detailed descriptions
6 of methodology or sites; that kind of thing.

7 So there will be more information
8 available for review at the time that we do start
9 scoping. So there will be more information to provide
10 comment on regarding the scope of the EIS.

11 Okay, skipping ahead now to 2017 and 2019,
12 we will, at that point, if necessary, develop and
13 publish the final EIS decision and rule.

14 So that's my short overview and, of
15 course, the rest of the time is to respond to your
16 questions. And if you could please limit them to
17 clarifying-type questions, that way we can allow for
18 maximum participation amongst the people that are on
19 the line here.

20 And remember that you can provide your
21 comments on the report. They're due by February 17th,
22 and you can provide them to this address;
23 WCO outreach@nrc.gov.

24 MS. JANAIRO: Okay. Thank you, Christine.

25 I think we'll leave your slides up in case anybody

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1 has a question specifically about one of them. We
2 have a number of written questions, but first we have
3 a hand that's been raised for a while. We'll go to
4 Ken Niles. Ken, your line is open.

5 MR. NILES: Thank you, Lisa. Good
6 afternoon. It seems that adding reprocessing as part
7 of one of the options unnecessarily complicates this.

8 And you did mention that the reason for doing this
9 was to include high-level waste storage in the
10 analysis, but at the same time, to anticipate what
11 that high-level waste form might be, seems to be
12 pretty speculative as well.

13 And so I'm curious as to why it's felt
14 important that this would be useful to able to
15 determine, you know, what the impacts would be of
16 long-term storage and then transportation.

17 MS. PINEDA: I agree that it will be
18 somewhat speculative, although there is information
19 available about other countries do reprocessing and we
20 do have some information about reprocessing. So what
21 we would have to provide is a, sort of, bounding
22 characteristics of what we think the high-level waste
23 would look like coming out of that reprocessing.

24 For example, would it be in a glass form
25 and it's just so that we can come to a conclusion

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1 about the safety of high-level waste storage as well.

2 But of course, it will be limited because we'll have
3 to make some very general assumptions about the nature
4 of that high-level waste, and it will certainly not be
5 a replacement for any EIS that would be done as part
6 of, either any reprocessing rule making, or licensing
7 a reprocessing facility.

8 MR. NILES: Okay. Thank you. It does
9 seem to unnecessarily complicate it when you could
10 just go to DOE for information on their vitrified
11 waste that they've been storing now for decades. So
12 thank you.

13 MS. PINEDA: Okay. Thank you. I've taken
14 note of that.

15 MS. JANAIRO: Thank you, Ken. Okay next
16 we'll go to a written question. This comes from Rick
17 McLeod, since NRC will license any and all interim
18 storage facilities, will NRC not be ready to license
19 an offsite interim storage facility until after this
20 EIS and then the site-specific EIS are complete? Does
21 NRC plan on doing this in parallel?

22 MS. PINEDA: This EIS is being done to
23 understand what we think the impacts would be of long-
24 term storage. In the meantime, if any site-specific
25 storage facility is proposed, or any regional storage

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1 facility, or central storage facility, that would
2 certainly continue.

3 If NRC is presented with an application
4 for a facility, because the waste confidence isn't
5 part of the regulatory program, so on the regulatory
6 side, there would be a licensing review of any
7 proposed regional facility, or central facility, or,
8 you know, additional site-specific facilities, and
9 that would continue.

10 It's just that, for this EIS, we're trying
11 to understand, get a sense of what would the impacts
12 be if storage were to continue for the long term? And
13 this EIS does assume that the regulatory, as I
14 mentioned, program continues. So it could be done,
15 you know, in parallel with this EIS.

16 And then, of course, there would be
17 information sharing because we would have an actual
18 application that we would be reviewing.

19 MR. RUBENSTONE: If I could jump in, this
20 is Jim Rubenstone, the thing to remember is that this
21 EIS is for the generic question of extended storage,
22 and if an application comes in for some offsite,
23 centralized, or any other sort of dry storage
24 facility, the current licensing framework of that is
25 to grant, if it's approved, a license for a 40-year

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1 period.

2 So any analysis done in that regulatory
3 action would be under the context of a license for the
4 initial 40-year period. So there are differences in
5 what you would do for an individual site license,
6 either offsite or at the site, compared to this
7 generic question of extended storage.

8 MS. JANAIRO: Okay. Next we'll go to a
9 written question from Linda Seeley, will all spent
10 fuel pools have the number of rods reduced to design
11 standards?

12 MS. PINEDA: The assumptions for the EIS
13 is that the pools will, at least what I think will be
14 the assumption, reflect in the analysis what they
15 contain now. So I know that there are some pools that
16 are, the original capacity was a certain amount, and
17 the capacity now is greater than that, so the EIS
18 would reflect what the capacity is now, but wouldn't
19 reflect the original capacity.

20 So I'm not sure if the caller was asking
21 about the EIS scope or a separate thing, which would
22 be the regulation of the spent fuel pools. I can't
23 say what the NRC would be doing concerning regulation
24 at the pools in their capacity.

25 MR. RUBENSTONE: Again, this is Jim

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1 Rubenstone, the current state of the pools has been
2 evaluated as part of the reactor licensing and any
3 amendments for the present capacities have been looked
4 at. So this EIS is to analyze impacts of some future
5 scenarios. It isn't directed towards, you know, any
6 present regulatory action.

7 MS. JANAIRO: Okay. And, Linda, and
8 others, if you have a follow-up question after you get
9 your answer to a written question, please feel free to
10 either type it in or raise your hand.

11 Next we'll go to another written question,
12 for the people raising your hands, please be patient,
13 we have quite a few written questions first, question
14 from Rick McLeod, does the 200-year time period, by
15 default, define the definition of the interim storage
16 period?

17 MS. PINEDA: I'm not sure what he means by
18 that. For the EIS, we chose a period for the analysis
19 to analyze the impacts, and the 200-year period would
20 be 200 years for analyzing the impacts. That 200-year
21 period starts at the middle of this century, and
22 extends out, and what it does is it picks up where the
23 present Waste Confidence Rule, the 2010 Waste
24 Confidence Rule, leaves off, and that is at about 120
25 years of storage.

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1 So the total storage time is 300 years and
2 that's what's being analyzed in the technical
3 activities, but the EIS will look at the 200-year
4 period for impacts. This EIS is not making any
5 statements about whether fuel would be stored for that
6 long or not, because that is being done strictly under
7 the regulatory program for license and storage.

8 So as Jim mentioned, it's a 40-year period
9 and I think the renewal is 40 years.

10 MR. RUBENSTONE: Yes, that's right,
11 Christine. And we're not making any statement about
12 defining what interim storage is. That's policy
13 questions and the NRC's role is to assure that
14 whatever storage takes place is done safely and
15 securely.

16 The 200-year period was picked as what
17 staff currently thinks we can do an analysis for that
18 has some reasonable results that we could get out of
19 it. It, to some extent, is an arbitrary choice just
20 to give us something to work on for the analysis and
21 it shouldn't be taken as defining anything about
22 policy.

23 MS. JANAIRO: Okay. And then here's a
24 question about the time frame, given the 2019 final
25 EIS anticipated date, does this mean we will not have

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1 an answer relative to interim storage until 2019 or
2 however long it takes to do the site-specific EIS
3 presumably for consolidated storage?

4 MS. PINEDA: Well, what would come out of
5 this EIS is an assessment of what we think the impacts
6 would be of storage. Any decision on what road to go
7 down concerning storage would be made by the Congress,
8 and then, of course, NRC, if presented with an
9 application, would license that. So how it actually
10 plays out is separate from this EIS.

11 It could happen, you know, if something is
12 proposed in the next couple of years, that becomes
13 policy, and there's an entity that is, you know, put
14 in charge of developing a storage, and presents NRC
15 with an application, and we review it, and so that
16 could very well be something that's going in parallel
17 with this EIS, but nothing on that side is waiting for
18 the outcome of this EIS.

19 MR. RUBENSTONE: And again, any decisions
20 on safety of a given site are made for that individual
21 site and the licensing period is 40 years as the
22 initial, and then 40-year period of renewals. Any
23 site coming in for a renewal, an existing site, after
24 the initial license, has to present an aging
25 management plan, which is evaluated by NRC staff as to

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1 its adequacy to ensure safety for that next renewal
2 period.

3 So even though we talk about analysis
4 periods of 200 years, the regulatory period continues
5 to be these 40-year increments. So an analysis for
6 200 years doesn't make any statement about the
7 particular safety of a particular site over a long
8 period. It only talks about the feasibility of what
9 the impacts would be over that period.

10 The evaluation for the safety is done for
11 each successive renewal period.

12 MS. JANAIRO: Okay. We'll go to two
13 written questions from Patrick Dostie and then we'll
14 go to Robert Rader, who has his hand raised. First
15 one from Pat Dostie, is the NRC limiting design basis
16 threats to ISFSIs based on acceptable dose at the
17 boundary of the owner-controlled area? If so, what is
18 that dose?

19 MS. PINEDA: That's something that I can't
20 answer. That's a regulatory question about licensing
21 the ISFSI. I'm not sure if Jim has an answer or not.

22 MR. RUBENSTONE: I don't have that answer
23 with me and I think if he could submit that to the Web
24 site, we'll try to get a response. That falls
25 directly into the current dry storage licensing

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1 framework and we can get a staff member from that to
2 respond. I'm sorry, we don't have that answer right
3 now.

4 MS. PINEDA: Yes. As Jim mentioned, you
5 can send that question to that WCO outreach address.

6 MS. JANAIRO: Next question, also from
7 Patrick Dostie, since the waste confidence EIS assumes
8 200 years, is the NRC contemplating extended storage
9 beyond the current 300 years, such as 400, 500, or
10 more years?

11 MS. PINEDA: Again, the 200-year period
12 for the EIS is an analytical period only. It's not
13 that we are assuming that spent fuel is going to be
14 stored for 200 years. In the technical activities
15 that are ongoing by NRC, and a number of other
16 entities, these organizations are looking at technical
17 issues that might be associated with storing waste for
18 300 years, and that 300-year period is just basically,
19 I think, it shows a number that would give them a good
20 range for doing an analysis to get a range of what the
21 behavior of the spent fuel would be over a long period
22 of time.

23 And so this EIS, in assessing the impacts
24 for 200 years, but accounting for 300 years of aging,
25 is being consistent with those other activities. But

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1 the NRC is not, as Jim mentioned, making any
2 statements about how long spent fuel should be stored,
3 or proposing anything about the length of storage.

4 MS. JANAIRO: Okay. All right. Well,
5 next up is Robert Rader; Robert? Well, maybe Robert's
6 microphone is not working. He does have a question
7 that he posed, a written question, if I can find it in
8 the queue, well, while I'm looking for that, oh no,
9 here it is. So does the 200-year period start at the
10 issuance of the final EIS or after the 60 years has
11 run under 51.23?

12 MS. PINEDA: The 200-year period for
13 impacts starts after the 60-year period that's
14 contemplated in the current Waste Confidence Decision.
15 So it starts, basically, at the middle of this
16 century.

17 MR. RUBENSTONE: And again, this is just
18 an analytical convenience. It's not saying that, at
19 some given time we are making a regulatory call for
20 the next 200 years. So I can understand the
21 confusion. It's a little complicated how waste
22 confidence fits together, but they shouldn't expect
23 that this 200-year period is tied to any given
24 licensing action because this EIS is not designed for
25 a specific licensing action.

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1 MS. JANAIRO: Okay. All right. Next,
2 we'll go to Joseph L., and after that it'll be Timothy
3 Runyon. So, Joseph, your line is open. Joseph, are
4 you there? Okay. We'll go to Tim Runyon. For anyone
5 who has a hand raised and if you're not sure that you
6 have a functioning microphone on your computer, please
7 go ahead and click, under the audio pane, the test
8 link and it will test your system for you. Tim, lines
9 open.

10 MR. RUNYON: Okay. This might be a little
11 confusing question for you folks because it's a
12 confusing question for me, but it seems to me that
13 we're now doing a generic EIS on waste confidence and
14 waste storage after a specific licensee has already
15 done an EIS for private fuel storage. Can you shed
16 some light on the relationship there between the two?

17 I mean, we've already been through a specific
18 process.

19 MS. PINEDA: Yes. That's correct. We
20 have and we have that information. This EIS is being
21 done for waste confidence specifically, whereas, PFS
22 was done for licensing a specific facility, but the
23 information in PFS, I think, will be very useful for
24 us in developing this EIS, because PFS was, what you
25 might call, a regional facility.

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1 And so it will have a lot of information
2 in it that we can use for this EIS. So there will
3 probably be a lot of references to that EIS, but they
4 have different purposes and they don't overlap each
5 other, except for where the impacts analysis might be
6 used in both EISs.

7 MR. RUNYON: But --

8 MR. RUBENSTONE: Yes --

9 MR. RUNYON: Pardon me.

10 MR. RUBENSTONE: I'm sorry. Go ahead.

11 MR. RUNYON: But wouldn't a lot of the
12 questions that you're posing as part of this EIS, as
13 they relate to waste confidence, wouldn't they have
14 been necessary to be answered as part of the EIS done
15 for private fuel storage?

16 MS. PINEDA: Well, the EIS for private
17 fuel storage was for the licensing period, and I'm not
18 sure if it looked into the license renewal period, but
19 is for a limited period of time. And so the main
20 difference would be, or a main difference would be,
21 that this one is looking out for extended periods and
22 we're going to have to make assumptions and some
23 projections about what the impacts of, you know,
24 storing very aged fuel would be.

25 Whereas, for PFS, that was for a specific

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1 licensing scope and had it operated for 40 years, or
2 whatever, and then had they issued a license renewal,
3 they would have had to do an update to that EIS for
4 the license renewal, so it doesn't have the same time,
5 temporal, scope.

6 MS. JANAIRO: Tim, did you have it --

7 MR. RUNYON: Yes. I mean, that's fine. I
8 mean, I got my follow-up questions answered.

9 MS. JANAIRO: Okay.

10 MR. RUNYON: I guess, you know, I'm
11 looking for the relationship, but I guess I understand
12 it a little better, but, you know, I guess still, from
13 a simple perspective, it's -- you know, I assume
14 where, you know, like she said, we're not recreating
15 the wheel here, but maybe the application is slightly
16 different because they're looking at longer time
17 frames.

18 MR. RUBENSTONE: I think one way to think
19 of it is the question that the EIS for PFS was
20 designed to answer was, what are the environmental
21 impacts of the NRC licensing this PFS facility?
22 Whereas, this waste confidence EIS the question is,
23 what would be the environmental impacts if fuel were
24 allowed to be stored for extended periods at a variety
25 of sites?

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1 So there's a lot of overlap, and I agree,
2 and we're certainly going to draw on the analyses that
3 were done for PFS and not duplicate it.

4 MR. RUNYON: Right.

5 MR. RUBENSTONE: But they're designed to
6 answer slightly different questions. It's a nuance.

7 MR. RUNYON: Okay. You know, I recognize
8 that they're different, but they don't appear to be
9 mutually exclusive.

10 MR. RUBENSTONE: No, no. Like I said,
11 there's a lot of overlap and certainly the analyses
12 that were done for PFS are going to be one of our main
13 sources right out of the gate.

14 MS. JANAIRO: Okay. Thanks, Tim, for your
15 question and thanks, Jim, for that clarification.
16 Written question from Patrick Dostie, will the NRC
17 consider design basis threats beyond vehicular threats
18 going forward, such as certain terrorist activities
19 with special weaponry?

20 MS. PINEDA: In the EIS, we will be -- so
21 was that a question about transportation? We are
22 going to be looking at, when we look at our analyses
23 of impacts of what you might call non-normal operating
24 conditions, accidents and the impacts that could
25 result from a terrorist attack. So that would be

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1 impacts on storage facilities, wet and dry storage
2 facilities, and also transportation.

3 So I couldn't tell you what our specific
4 scenarios would be at this point, but looking at the
5 impacts of a terrorist attack is within the scope of
6 the EIS.

7 MS. JANAIRO: Okay. And then a written
8 question from Dianne D'Arrigo, to what extent will NRC
9 include Homeland Security as a cooperating agency on
10 plutonium separation? What about IAEA?

11 MS. PINEDA: Our intent right now is that
12 we will not have formal cooperating agencies for this
13 EIS, but we will certainly reach out to other Federal
14 Government as well as the state and local governments
15 for input concerning the EIS.

16 MR. RUBENSTONE: I think this question was
17 specifically about an aspect of a reprocessing
18 analysis.

19 MS. PINEDA: Right.

20 MS. JANAIRO: Right.

21 MR. RUBENSTONE: So, you know, that's a
22 consideration within there.

23 MS. JANAIRO: Okay. Next, we'll go to Ken
24 Niles who has his hand raised. Ken, your line is
25 open.

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1 MR. NILES: Thank you, Lisa. I wanted to
2 follow up on a question just a moment ago about the
3 terrorism part, and I guess I wanted some explanation
4 on the level of effort and rigor that would go into
5 considering the impacts of terrorism. The language in
6 the draft report on Page 13 is kind of weak at best,
7 where it talks about the EIS will include a discussion
8 of terrorism and the NRC will consider this.

9 Is this going to be a rigorous evaluation
10 and get the same level of rigor as the other parts of
11 the EIS or is something less planned for the terrorism
12 aspect?

13 MS. PINEDA: As I mentioned earlier, we
14 are going to be using, to the extent we can, existing
15 analyses in relevant NEPA documents. So the terrorism
16 analysis, there could be some newly developed analyses
17 for this EIS, but we would also reference existing
18 analyses that we have done for other EISs if they're
19 applicable for the specific scenario that we would be
20 wanting to analyze the impacts for.

21 You know, if there's a certain scenario of
22 a terrorist attack, you know, related to an ISFSI, if
23 the NRC has analyses that were already done, we would
24 make use of those analyses, but that's not to say that
25 we wouldn't do, you know if we consider that there's a

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1 certain scenario that we need to think about, that has
2 not previously been analyzed, that we wouldn't analyze
3 that.

4 MR. NILES: Okay. So it sounds like more
5 than just a discussion is planned.

6 MS. PINEDA: Yes. It would be treated the
7 same way as the realm of the other impacts.

8 MR. NILES: Great. Thanks. Okay. Thank
9 you for that clarification.

10 MS. JANAIRO: Okay. Next, we'll go to a
11 written question from Linda Seeley, and, Linda,
12 because we have so many people wanting to ask
13 questions, I'm going to try to pull out, from your
14 comment and question, a few questions that haven't
15 been addressed yet, such as, how can you make a
16 generic analysis for sites that are very different
17 geologically? Like, that's getting at the issue of
18 the composite sites, instead of doing a site-specific
19 analysis.

20 MS. PINEDA: And that's what we will have
21 to look at when we're developing our composite sites
22 is, the range of settings that actual sites are
23 located in, and to make sure that our composite sites
24 capture that range, so that when we develop the
25 impacts, we have also captured the range of potential

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1 impacts.

2 So while we're not going to be evaluating
3 each difference among all of the sites, we will need
4 to do it in a bounding way so that we've captured the
5 range of characteristics.

6 MR. RUBENSTONE: And just to add, we
7 talked about this a little bit more in the earlier
8 webinars, we will have multiple composite sites. So
9 there will be sites that share certain geologic
10 characteristics, certain other degree of natural
11 hazard characteristics that will be composited for
12 that purpose.

13 So we haven't determined exactly how many
14 composite sites will be needed to capture the full
15 range, but it's probably more than one or two. It may
16 be, you know, ten, but again, we haven't made that
17 decision yet. I think with the question about the
18 geological setting, certainly, you know, a composite
19 site that represents some level of earthquake hazards
20 for the Western part of the U.S. would be distinct
21 from a composite site that represents a different
22 earthquake hazard in a different part of the country.

23 Likewise, for other natural hazards,
24 likewise, for proximity to water bodies, so there's a
25 number of criteria we'll use to try to group sites

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1 together. Right now, there's 60-some ISFSI licenses
2 out there, and the number of sites, some of which have
3 some similarities, but some of which might be the only
4 site, kind of, in a class. So that's still to be
5 done.

6 We're trying to not have to analyze, you
7 know, 100 different sites if we can come up with
8 enough commonalities.

9 MS. PINEDA: And we are also remaining
10 open to the idea that we will, I think we said this in
11 our meetings, consider actually analyzing an actual
12 site if we think that that site, you know, will shed
13 some light on when you're comparing impacts. If it
14 looks like it's worth doing a specific actual site,
15 because that site is so different, or whatever, if it
16 just has certain characteristics that make it worth
17 analyzing that site, then we would do that.

18 But right now, our methodology is to
19 develop the composite sites, but we're remaining open
20 to that possibility.

21 MS. JANAIRO: Okay. And Linda also has
22 another question, upon what scientific research did
23 you base your assumption that spent fuel can be stored
24 safely for up to 300 years?

25 MS. PINEDA: Well, this EIS hasn't been

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1 developed yet, and therefore, we haven't made that
2 conclusion yet. The purpose of the EIS is to do the
3 analysis and to identify what the impacts would be for
4 storing waste for that 200-year impact period, which
5 is for the 300-year aging period.

6 So we have not made that conclusion yet.
7 That conclusion will come out of the analysis of the
8 EIS. So, you know, we'd go through and do the EIS and
9 then come out with a conclusion that the current Waste
10 Confidence Decision, which is 60 years past licensed
11 life, should not be changed, or we could come out
12 saying, we think we can extend it to 100 years past
13 licensed life, but once you get past 100 years, the
14 costs and other impacts to workers are such that it
15 doesn't work to try to store waste beyond those
16 periods.

17 Even if it's being managed under a
18 regulatory program, there could be certain impacts
19 that might results in a recommendation in the EIS that
20 waste should not be stored beyond a certain period,
21 but again, that does not relate to the licensing of a
22 specific facility. It would just be a conclusion
23 about how long it could be stored; how long spent fuel
24 could be stored.

25 MS. JANAIRO: Okay.

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1 MR. RUBENSTONE: Just to add to that, even
2 though dry storage systems don't have moving parts,
3 they are still actively managed and people shouldn't
4 jump to some assumption that when we say we will
5 analyze this for 200 years, or a 300-year period, that
6 that means that there's no active participation by the
7 owner of the fuel and the storage site, remediation,
8 repair, all those aspects, inspection monitoring, are
9 part of the regulatory program that is one of our
10 assumption.

11 MS. JANAIRO: Okay. Next, we'll go to Tom
12 Clements, who has his hand raised. Tom, your line is
13 open.

14 MR. CLEMENTS: Yes, can you hear me?

15 MS. JANAIRO: Yes.

16 MR. CLEMENTS: Yes, my name is Tom
17 Clements and I work for the Alliance for Nuclear
18 Accountability, which is based Washington, but I'm in
19 South Carolina, and my question relates to the Blue
20 Ribbon Commission Report that was issued last week,
21 and I'm curious what you think the impact of that
22 report, and any ensuing action by Congress of the
23 Department of Energy, might have on your process?

24 And firstly, if there is going to be any
25 congressional or DOE action where they take the

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1 recommendations into account and do something, it
2 could have an impact on your timeline.

3 And secondly, getting back to the very
4 first question, the Blue Ribbon Commission did not
5 make a recommendation for reprocessing of spent fuel
6 and they did make a recommendation for community
7 involvement in siting storage or disposal facilities,
8 so it seems to me like, whatever happens next is going
9 to impact your process and I'm just wondering how
10 you're going to take this into account.

11 And people in South Carolina are obviously
12 concerned about what the future may hold for the
13 Savannah River site, whether it be reprocessing or
14 spent fuel storage, and there's concern about that
15 here.

16 MS. PINEDA: I recognize the Blue Ribbon
17 Commission did not recommend reprocessing and so our
18 inclusion of that is, we just want to make sure that
19 we include high-level waste in our analysis at a
20 general level, but we're not going contrary to what
21 the Blue Ribbon Commission is saying, because we're
22 not recommending any of these scenarios, but we're
23 just trying to include an analysis of the impacts of
24 storing high-level waste.

25 And regarding their other recommendations,

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1 I think it was published in the draft, it was 2 and 4
2 that talked about regional storage and a siting of
3 disposal facility, we are, for this EIS, of course,
4 including regional storage scenario as well as central
5 storage. And all of our scenarios assume that this
6 spent fuel and high-level waste would be transported,
7 ultimately, to a disposal facility.

8 Regarding the community siting a disposal
9 facility, or, I guess, any facility with community
10 involvement, that's something that would be part of
11 the regulatory process, so would not really affect
12 this EIS, although there could be some discussion in
13 the EIS about the process, but I don't think it would
14 affect the analysis of impacts of storing waste for
15 long period. That's the scope of this EIS.

16 MR. RUBENSTONE: Just to follow up, it's
17 important to keep in mind that we've laid out our
18 process and assumptions based on what our
19 understanding of current policy is, and as policy
20 evolved, it would certainly take that into account in
21 the EIS.

22 So if there is a more defined path coming
23 forward, that may change --

24 MS. PINEDA: Right.

25 MR. RUBENSTONE: -- once it's analyzed.

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1 MS. PINEDA: Maybe we have a draft EIS and
2 then a policy comes out that becomes law and our final
3 EIS looks very different from the draft EIS. That's
4 possible.

5 MR. CLEMENTS: The Blue Ribbon Commission
6 also said that the first fuel they were looking at was
7 consolidating material from closed reactors. How
8 would you address that?

9 MS. PINEDA: I think that would be
10 addressed in our regional storage. We haven't
11 discussed whether we would be -- you're talking about
12 consolidating fuel at specific reactor sites from
13 other reactor site or consolidating it at a regional
14 facility?

15 MR. CLEMENTS: Well, I think it's unclear
16 if they would be consolidated at an existing reactor
17 that already has fuel, but they were looking at the
18 material that, they used the term orphaned, or
19 stranded, I think, which I don't necessarily agree
20 with, but, like, Rancho Seco, for example.

21 MS. PINEDA: I think that will be
22 addressed in our regional storage facility scenario.
23 We do still have yet to work out more of the details
24 of each of the scenarios, so that's something, of
25 course, that we're aware of, the fact that there are

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1 decommissioned sites with spent fuel, and what will we
2 do within the at-reactor storage scenario, and within
3 the regional storage scenarios, what will we do with
4 those? That's something we haven't worked yet.

5 MR. CLEMENTS: Thank you.

6 MS. JANAIRO: Okay. Thank you, Tom.
7 Okay. We have a half an hour and a lot of questions,
8 so we'll try to get through some of the written ones
9 and then go back to the hands raised, and just for the
10 people who have their hands raised, Richard Moore and
11 Moreen Conley, you'll be the next two up, so be
12 prepared please.

13 We have a comment from Charisse Roller,
14 storage and disposals should be included in the
15 preliminary scenarios list on Slide 8.

16 MS. PINEDA: Storage --

17 MS. JANAIRO: And disposal.

18 MS. PINEDA: Storage and disposal, oh,
19 okay. Okay.

20 MS. JANAIRO: And then we have a question

21 --

22 MS. PINEDA: Except that --

23 MS. JANAIRO: Go ahead.

24 MS. PINEDA: Just for clarification, we
25 aren't going to be looking at the impacts of disposal,

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1 but I understand that, right, the endpoint for each
2 scenario is disposal, so we can clarify that.

3 MS. JANAIRO: Okay. And then we have a
4 written question from Melanie Rasmusson, why assume
5 that nuclear power will remain in the same proportion
6 given the number of applications? And is that
7 assumption also for 200 years?

8 MS. PINEDA: That's the assumption we have
9 made to date. It's possible that we could change that
10 assumption down the road if we see that it looks like
11 it's inevitable that the proportion will increase,
12 that we could change the assumption, but I think based
13 on the level of uncertainty right now, the assumption
14 that we wanted to make would be that it would remain
15 the same.

16 MR. RUBENSTONE: And then one of the
17 things we're looking at as we do these analyses is to
18 see what actually drives some of the impacts. So if
19 nuclear power was to grow as a proportion and grow in
20 the total amount of power being produced by nuclear
21 power plants, that would affect the amount of spent
22 fuel being produced.

23 So if there's a way to scale it in the
24 analysis, we'll be looking at that, but we needed to,
25 sort of, frame the problem as a starting point. And

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1 if it looks like it's something that we can, in fact,
2 analyze, we could work from that. You do have to some
3 limiting assumptions, otherwise you've got a very
4 open-ended problem.

5 But right now, nuclear power is about 20
6 percent of electricity generation. We will be
7 assuming there is some growth in electricity
8 generation going forward, but it will continue to be
9 about 20 percent from nuclear power; at least that's
10 the current status we're working with. And we're open
11 to suggestions, as Christine noted, public comment is
12 a big part of our process.

13 MS. JANAIRO: Okay. Here's a written
14 question from Ace Hoffman, are the difficulties
15 associated with transferring the waste from the dry
16 storage containers to transport containers considered,
17 specifically, in regards to expected or unexpected
18 degradation of the containers, the fuel rods, the
19 cladding, et cetera, during the period you're looking
20 at?

21 MS. PINEDA: In general, for the EIS,
22 we're looking at the impacts of storing waste, so that
23 includes management of the waste, so, yes, that would
24 include, for example, we might look at what are the
25 worker exposures for transporting from the pools to

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1 dry storage? And as we look at, down the road, dry
2 storage, what would be the impacts if you have to
3 repackage that spent fuel that's on the storage pad?

4 So the answer is, yes, that the actions
5 then that are associated with managing the storage of
6 spent fuel are included in the scope of the impacts of
7 storing spent fuel.

8 And the level of detail that we go into
9 looking at the specific cases of what could happen
10 when you transfer fuel from a pool to a pad, we'll
11 again, be making some bounding assumptions. So it
12 won't be the level of detail that you would see in a
13 reactor licensing EIS, but we will need to look at
14 that and make some bounding assumptions, and make
15 conclusions about the impacts.

16 MS. JANAIRO: Okay. Here are two
17 questions from Heather Westra. First, with respect to
18 Assumption 6 on Page 11 of the report, can you explain
19 what is in the last sentence? Here's the sentence,
20 "however, in the event licensees cannot fulfill their
21 obligations, the U.S. Government will provide
22 sufficient resources and protection to ensure
23 continued safe and secure storage."

24 Heather goes on to say, this seems to be
25 at odds with a statement on Page 12, last paragraph of

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1 the section, first sentence, and here's the sentence,
2 "The waste confidence EIS will also assume that the
3 current structure of financial assurances for spent
4 fuel will continue to exist."

5 MS. PINEDA: Okay. Hold on.

6 MS. JANAIR: So it sounds like in one
7 place it's saying the assumption is things will
8 continue as they are right now, but in another section
9 it sounds like the government will be there to step
10 in.

11 MS. PINEDA: Well, what we're trying to
12 say is that there would not be a loss of financial
13 responsibility. So we're assuming that the current
14 framework is in place, but for purposes of doing the
15 EIS analyses, we're also assuming that if there were
16 an event where licensees could not fulfill their
17 obligations, that the U.S. Government would step in
18 and make sure that the financial resources were there.

19 So this is for the impacts analysis for
20 the EIS, because if you make an assumption that you
21 don't know what would happen if a licensee were not
22 able to make their financial obligations, then you're
23 running into a scenario -- I mean, it's more open-
24 ended, so this is consistent with assuming that the
25 waste is stored under an active regulatory framework

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1 and that the resources are there to make sure that
2 it's managed the way it needs to be managed.

3 MS. JANAIRO: Okay. And then Heather also
4 had a question, how will the NRC consult with
5 federally recognized Indian tribes impacted by this
6 EIS?

7 MS. PINEDA: First of all, the NRC has a
8 group that keeps in regular contact with the state
9 governments, and also with the tribes, and for this
10 webinar, I believe they have sent a letter to a number
11 of tribes that have expressed interest in storage
12 issues, notifying them about the webinar, also about
13 the report, and about the email address.

14 And also encouraging them to, I believe,
15 subscribe to the email address so that they receive
16 communications. So we have an existing mechanism for
17 communication with the tribes already within the NRC,
18 but in addition to that, of course, as we get interest
19 from specific tribes on this issue, we will be
20 reaching out to those tribes.

21 For example, in the scoping process, we
22 might decide that we want to have smaller group
23 meetings with just the tribal organizations, so we
24 will be reaching out to the tribes specifically, and
25 that's part of developing our plan for, sort of, our

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1 general communication plan over the next year.

2 MS. JANAIRO: Okay. Next, we'll go to
3 Rick Moore, who has his hand raised.

4 MR. MOORE: Thank you, Lisa. Page 11 of
5 your draft report, under the Section 8.1, preliminary
6 assumptions, you have a statement that's at the very
7 end of Section 5 and it deals with long-term storage
8 saying, "some packaging of waste may, before disposal,
9 would assume it's part of the disposal facility
10 operations.," and then later in the paragraph you say,
11 "potential further repackaging of spent fuel for
12 disposal may also occur, but will not be considered in
13 the waste confidence EIS."

14 My question is similar to the one
15 previously, regarding repackaging for transportation,
16 I'm concerned about repackaging for disposal if you
17 are actually assuming, or assuring, as part of the
18 process that, once a disposal facility is ready to do
19 a repackage after extended storage, that it will be in
20 a condition that is safe to do so, because it seems
21 like that sentence says you're not going to consider
22 the repackaging at a disposal facility as part of this
23 EIS.

24 MS. PINEDA: Right, right, not at a
25 disposal facility, but we are assuming that the spent

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1 fuel is maintained in a way that is amenable to
2 disposal. So it's repackaged as necessary to keep it
3 in a condition so that it can be transported to a
4 disposal facility, but if there were specific package
5 requirements for the actual disposal facility, we're
6 not including that particular repackaging in this.

7 MR. MOORE: But you are, included in your
8 analysis, trying to reach a conclusion that it would
9 be safe to repackage once it arrives there, is that
10 correct?

11 MS. PINEDA: Yes. And it's possible that
12 we would include in our analysis, you know, maybe,
13 what would be the impact of some percentage of the
14 fuel were not able to be repackaged for some reason.
15 There's got to be a range of conditions of the fuel
16 that we would be looking at for repackaging.

17 But the general assumption is that the
18 fuel is maintained in a way that it can be disposed
19 of.

20 MR. MOORE: I'd suggest that you look at
21 that sentence in that last paragraph of Assumption 5,
22 just try to clarify it a little better when you
23 finalize the report.

24 MS. PINEDA: Okay. Thanks.

25 MS. JANAIRO: Okay. Thanks, Rick. Next,

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1 we'll go to Moreen Conley.

2 MS. CONLEY: Hi, thanks for taking my
3 question. I was hoping you could explain, in a little
4 more detail, the decision in this EIS to include the
5 impact of terrorism and does that represent an overall
6 change in NRC policy? It's my understanding that,
7 since the 9th Circuit decision, NRC's policy has been
8 only to include terrorist impacts in cases in the 9th
9 Circuit.

10 MS. PINEDA: Yes. That's the general
11 policy, but the 2nd Circuit -- right, because the 9th
12 Circuit ruled that that's what needed to be in the
13 scope. The 2nd Circuit ruled in agreement with the
14 NRC's position that it did not need to be included,
15 but in the 2010 waste confidence update, we did
16 include a consideration of terrorism impacts, and so
17 this is to be consistent with that.

18 It's just that we're trying to be more
19 inclusive in the analysis rather than excluding, and
20 also, this EIS, it's not specific to the 9th Circuit,
21 but the 9th Circuit is the more conservative in terms
22 of the inclusive ruling, so it makes sense to include
23 that information in this EIS rather than exclude it,
24 as you could say that the EIS does apply to the 9th
25 Circuit, even though it is generic.

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1 MS. CONLEY: Okay. And if I could ask a
2 follow-up question, the analysis that's being done for
3 this EIS, will that be entirely classified? Will
4 there be a publicly released summary or will it be a
5 public analysis that will be entirely available?

6 MS. PINEDA: What I imagine is that there
7 will be some information that may not be generally
8 releasable to the public. I think how that works is,
9 sometimes that information can be released if people
10 sign agreements.

11 So there will certainly be a discussion in
12 the EIS itself about the conclusions of impacts, but
13 the details that led up to the conclusions in terms of
14 the mechanism, I guess, for the terrorist attack, that
15 kind of information would not be made public.

16 So I think it would be a combination of
17 some information could be released, but I wouldn't be
18 surprised if there was some information that we were
19 not able to release.

20 MS. CONLEY: Okay. Thank you.

21 MS. JANAIRO: Okay. Next, we'll go to
22 Gene Stone. Gene's line is not cooperating. We'll go
23 to Jane Beetem. Jane?

24 MS. BEETEM: Hi, Lisa. I'm here.

25 MS. JANAIRO: Hello. Go ahead.

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1 MS. BEETEM: The language in the document
2 references a centralized storage facility, and I'm
3 calling from Missouri, which is the geographical and
4 population center of the country, and wonder if you
5 really meant centralized or if you're talking about
6 more consolidated storage, which might be in a less
7 populated area?

8 MS. PINEDA: Yes. What we mean is storage
9 all at one site. So maybe centralized is not
10 geographically centralized, but, right, it would be a
11 site that would be located somewhere in an area that's
12 probably not highly populated, but I couldn't say
13 where that would be. So it's certainly not
14 geographically centered.

15 MS. BEETEM: All right. Thank you.

16 MR. RUBENSTONE: I think the distinction
17 is just rather a number of storage facilities that are
18 just a bit larger than the individual ones now, as
19 opposed to one or more that were quite a bit larger
20 than the way they exist now. Yes, not trying to make
21 any geographic --

22 MS. PINEDA: Right. If you stored the
23 spent fuel and high-level waste at, say, four regional
24 facilities, you would have a certain set. The impacts
25 would look a certain way. If you stored all of that

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1 at one location, how would it look different? How
2 would the impacts look different?

3 MS. JANAIRO: Okay. All right. Thank
4 you, Jane, for that question. What we're going to do,
5 we're going to go through the rest of the people who
6 have their hands raised so we can get their question,
7 hear what it is, and then we'll run a little bit over
8 from the 2:30 scheduled end time so we can get through
9 some of the list of written questions that we have.

10 David Snellings, you're next in the queue,
11 but you need to enter your audio PIN in order for me
12 to unmute your line, so we're going to skip you for
13 now. I sent you the audio PIN. You should make sure
14 you enter that and we'll go to Joseph L..

15 MR. L.: Hello.

16 MS. JANAIRO: Hello.

17 MR. L.: Can you hear me?

18 MS. JANAIRO: Yes, we can.

19 MR. L.: Yes. My question is that, I am a
20 member of a local planning board as well as the
21 emergency management coordinator in an URPA 2 town
22 that is not a host. We have hundreds of townhouses
23 and apartments that are coming before the planning
24 board that's less than 3/8 of a mile away from dry
25 storage.

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1 The question is, we asked the state and
2 the county what the safety aspects might be 20, 30, 40
3 years from now, because a housing development should
4 last a couple hundred years. They all referred us to
5 the NRC, but based on this confidence EIS, it seems
6 like the football is getting kicked back downstairs to
7 us.

8 And we have no technical expertise to
9 determine whether we should approve apartments and
10 townhouses, that should last several hundred years, so
11 close to dry cask storage. What does a local planning
12 board do?

13 MS. PINEDA: I think if you want very
14 specific information for that facility, you could
15 start at the NRC with the people that are involved in
16 the licensing and oversight of that facility. And I
17 think you could even start with the resident
18 inspector, but that would give you information about
19 that facility and the plans.

20 You know, how long that facility is
21 planning to operate and whether there's a renewal
22 already issued, or whether it's planning to have a
23 request --

24 MR. L.: Well, you did not wish to be site
25 specific, however, the site that I'm talking about is

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1 scheduled to close in eight years, and yet, the dry
2 cask will remain for hundreds of years apparently.

3 MS. PINEDA: Okay. Well, we are going to,
4 as I mentioned earlier, have to determine how we will
5 factor in, in terms of looking at the impacts, and
6 this is a good point you're raising, extended storage
7 of spent fuel, including at sites that are going to be
8 decommissioned.

9 So you're talking about a potential
10 socioeconomic impact or at least the socioeconomic
11 decisions that are made based on knowledge of
12 continued extended storage.

13 MR. L.: Christine, my concern is more
14 than that, it's safety. The engineers who designed
15 these dry casks are not willing to guarantee them from
16 leakage for more than 60 years, and yet, we're trying
17 to talk about confidence that goes into, not only 200
18 years, it's more like 250 and 300 years.

19 So again, we're a local planning board.
20 We do not have expertise in this. Should we permit
21 this housing or not? That's the question.

22 MS. PINEDA: It is going to continue under
23 a license. The storage will continue under a current
24 NRC license, so whatever is needed to make sure that
25 that spent fuel is stored safely, the NRC would make

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1 sure that that happens on the regulatory side.

2 MR. RUBENSTONE: Let me just jump in
3 again. We don't want to confuse what we're doing in
4 the waste confidence as making any policy decision
5 about storing things for longer than the period
6 they're licensed.

7 And the second issue is, yes, every
8 engineered system has a design lifetime built into it,
9 but the assumption that's built into our idea of
10 continuing oversight is that, any remediation,
11 repackaging, repairs, et cetera, that are needed to
12 make sure that that facility is maintained safe and
13 secure, will be done.

14 So it's less tied to the lifetime of an
15 individual container to more than the idea that we
16 have regulations that have certain standards for
17 safety, and they will be met, and the owner of the
18 fuel will take appropriate measures to meet those
19 standards.

20 MS. JANAIRO: Okay. Thank you for your
21 question, Joseph. Next, we'll go to David Snellings.

22 MR. SNELLINGS: Okay. I had questions
23 relating to the relationship between the EIS and the
24 BRC report, and those were answered. I had two of
25 them, and those were answered previously, and I thank

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1 you for the opportunity.

2 MS. JANAIRO: Thank you.

3 MR. SNELLINGS: Okay.

4 MS. JANAIRO: Okay. Then we'll go through
5 the written questions. Here's a question from Don L.,
6 regarding the time period, why not divide this 200-
7 year time period in groupings of, say, 50 years, as
8 that would relate to future developments and storage
9 that would equate to much less expense now?

10 MS. PINEDA: It's possible that as we do
11 the analyses that it might make sense to group the
12 analyses of the impacts into increments like 50 years
13 or something, but again, we're not making decisions
14 about programs or policies. So however we group it,
15 or don't group the analysis, won't have any bearing on
16 the actual regulation, but it is possible that it
17 would make sense, as we get information from the
18 analyses, to group the impacts in increments.

19 MS. JANAIRO: Okay. And here are two
20 questions from Patti Davis, I'm going to try to
21 combine them into one, well, I'll ask them together,
22 shouldn't all storage sites have a minimum 50-mile
23 evacuation zone, and then also, are there any sites,
24 or aren't some sites too small to have 200 years of
25 storage onsite? Like, with the size of a facility --

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1 MS. PINEDA: Right, expansion. Let me
2 respond to the second part first. It's true that
3 there could be some specific sites that don't have the
4 capacity to expand to hold the amount of spent fuel
5 that would be generated over a couple hundred years,
6 and so that's something that we will need to consider
7 when we're determining how to do the analysis for the
8 at-reactor scenario, is taking into account that some
9 sites may not, and that's sort of a site
10 characteristic is that, okay, they're located in such
11 a fashion that they can't expand, the ISFSI cannot be
12 expanded, so what do we do about that?

13 And that is something that we have to
14 factor in. The other question about the 50-mile
15 radius is a regulatory question that it's not my
16 purview to answer that. It's more of a regulatory
17 question rather than a question for doing the impacts
18 analysis. And for the impacts analysis, we would
19 assume whatever the current requirement is.

20 MS. JANAIRO: Okay. Here is a written
21 question from Heather Westra, how will the generic EIS
22 be used with respect to ISFSI license renewals? Will
23 the generic EIS be used in place of an EA for ISFSI
24 license renewals?

25 MS. PINEDA: If she's referring to this

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1 EIS, it will not be used in place. It's possible that
2 future storage NEPA analyses could refer to the
3 analyses in this EIS, but this EIS would not take the
4 place of those analyses.

5 MS. JANAIRO: Okay. Here's a question
6 from Gene Stone, will the NRC do a baseline health
7 study for all sites so we'll know before and after
8 what the health effects will and have been? What will
9 be the effect on property values when people know that
10 they will be living next to a nuclear waste dump? So
11 baseline health study --

12 MS. PINEDA: For this EIS, I don't think
13 that we would be doing a baseline. We will use
14 information in existing EISs to the extent that we
15 need to do our impacts analysis, but we wouldn't be
16 doing something like a new study of baseline health.

17 And then, oh, the property values --

18 MS. JANAIRO: Yes. Will you be assessing
19 at all? Is that considered --

20 MS. PINEDA: That is considered to be a
21 socioeconomic impact and so the EIS will be
22 considering that in the scope of its impacts, but
23 again, we'll be using existing information to the
24 extent that we can. But of course, we want to make
25 sure that we consider the significant factors for this

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1 EIS.

2 So if now, or during scoping, people have
3 specific input about, you know, something that is
4 clear that would be a significant impact, that that's
5 information that we would want to have.

6 MS. JANAIRO: Okay. Here's a question
7 from James Knorr, will there be some assumptions on
8 changes to environment, such as influx of endangered
9 species or changing lake levels, or will this be
10 covered during the licensing process for each ISFSI?

11 MS. PINEDA: Yes. That would be covered
12 during the licensing process for each ISFSI.
13 Endangered species is a good example. It's very site
14 specific and when we have our generic sites, if one of
15 the generic sites is located in a certain region with
16 certain characteristics, in terms of the weather and
17 the vegetation, that you could make some general
18 assumptions about the types of wildlife that would be
19 there, and the types of vegetation, but of course, you
20 wouldn't be able to do an impacts analysis.

21 MS. JANAIRO: Okay. Here's a question
22 from Joseph Ziegler, the existence of a need for this
23 analysis seems to indicate that the Commission really
24 does not have confidence that spent nuclear fuel
25 disposal will be available within the next 200 years.

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1 Wouldn't a long-term study about the technical issues
2 associated with spent fuel aging make much more sense
3 and provide real data versus speculative assumptions
4 for a long-term storage EIS?

5 MS. PINEDA: The purpose of this EIS is to
6 get a sense of what the impacts would be, but we are
7 also engaged in analyses of the technical issues
8 associated with aging spent fuel, and that's
9 supporting the regulatory program, so the technical
10 information that comes out of that activity could
11 inform changes to our regulations.

12 And so the purpose of this EIS is to just
13 get a sense of what we think the impacts would be if
14 we were to store it for long periods.

15 MR. RUBENSTONE: Yes. There are parallel
16 efforts going on right now to identify and define the
17 technical areas that need to be considered for
18 extended storage and we should have a report coming
19 out, hopefully, within the next couple months that
20 outlines NRC's views on that.

21 There are a number of other groups that
22 have done some other work on that. There's a report,
23 recently, by the Nuclear Waste Technical Review Board
24 on that issue, and a report from the Electric Power
25 Research Institute on a similar issue. And I think

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1 the Department of Energy is also doing similar
2 studies.

3 So those are going on in parallel,
4 focusing on the technical aspects, and how fuel ages
5 over time, and the potential mechanisms for
6 degradation of the storage systems.

7 MS. JANAIRO: Okay. Here's a very
8 specific question from Linda Seeley, how long are dry
9 casks guaranteed to sequester radiation without
10 release to the environment?

11 MS. PINEDA: I'll let Jim answer that if
12 he can.

13 MR. RUBENSTONE: Dry casks in ISFSIs, are
14 certified by the NRC for a fixed period of
15 performance. It was originally 20 years. The
16 regulations have recently been revised to allow
17 certification for 40-year periods.

18 Same with the licensing of dry storage
19 facilities. Again, fixed period, originally 20 years,
20 now the new ones will have a 40-year period, and a
21 renewal period for up to 40 years. And the reviews
22 that are done at each stage of those are aimed to
23 demonstrate that they are in compliance with the NRC
24 regulations.

25 MS. JANAIRO: Okay. Here is a question

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1 from Rod McCullum, there are considerable efforts
2 under way at DOE, and industry, and internationally,
3 to conduct research on extended storage of used fuel.

4 How does NRC intend to factor in the results of this
5 research and how might that affect the timing of the
6 EIS?

7 MS. PINEDA: I can just say at this point
8 that, this EIS, the endpoint for this EIS is 2019,
9 which I believe is about when we would be getting, Jim
10 could maybe clarify this but, some initial results
11 from the various technical activities.

12 It could be that if technical information
13 isn't available at the time we publish the draft EIS,
14 and then it becomes available in the subsequent, and
15 it's incorporated, or maybe it's incorporated into the
16 final EIS and somewhat changes the discussion, or
17 maybe it simply provides more of a basis for the
18 discussion in the final EIS, or it could be that if
19 information isn't available until after the final EIS
20 is published that, once that information becomes
21 available, we would need to revisit the EIS and make
22 sure the conclusions are still sound, or if not, then
23 we would have to issue, probably, an addendum or a
24 supplement to the EIS.

25 MR. RUBENSTONE: Yes. This goes along

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1 with what I said before about the technical work
2 that's ongoing. I would hope that we have results
3 coming in, you know, preliminary results coming in
4 soon, and final results coming in further along. The
5 technical program that NRC is developing has a similar
6 time frame to the EIS, but as Christine said, we are
7 not dependent on those technical results.

8 We are going to use the best available
9 information and as the new information becomes
10 available, either from the NRC's own sponsored work or
11 some of this work being done, as pointed out, by other
12 groups, like industry, we'll be looking at that and
13 seeing how that would impact the analyses that we did,
14 and if there are significant changes, we would
15 consider issuing supplements.

16 MS. JANAIRO: Okay. There was a
17 clarification from John Parkyn, just confirming that
18 PFS is a national facility and answered these
19 questions, I think Tim Runyon had asked earlier, why
20 the NRC didn't use the information from the PFS EIS.
21 So John clarified, it's a national facility. It's
22 period of time was 40 years and beyond.

23 MS. PINEDA: Thank you.

24 MS. JANAIRO: Gary Headrick said, one
25 impact from long-term storage onsite will certainly

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1 result in extremely vocal and legal actions from local
2 populations. The mayor of San Clemente could not
3 participate in the discussion, but asked me to relay
4 the statement that prolonged onsite storage would be
5 absolutely unacceptable.

6 And Gary goes on to provide some
7 information on San Clemente and that specific
8 situation, but how does the NRC justify allowing this
9 waste to continue to be produced when there's no
10 viable long-term solution for highly radioactive
11 storage?

12 MS. PINEDA: I'm sorry, can you repeat the
13 last sentence?

14 MS. JANAIRO: It was a question, how does
15 the NRC justify allowing this waste to continue to be
16 produced when there's no viable long-term solution for
17 highly radioactive storage? I think the -- go ahead.

18 MS. PINEDA: Yes, that gets to the
19 question of waste confidence and the policy decision,
20 but it also relates to our regulatory program that we
21 have in place where we make sure that storage is
22 occurring under a license, and that license is for 40
23 years, and if storage continues beyond the term of
24 that license, there has to be a license renewal, which
25 is accompanied by a safety review.

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1 So the confidence that NRC has is
2 dependent on continuing its regulatory program and
3 making sure that the waste is stored safely under that
4 program.

5 MS. JANAIRO: Okay. Here is a question
6 from Emerald L., can someone tell me how many members
7 of the public are participating in this webinar? It's
8 difficult to determine who's a member of the public
9 versus somebody representing an agency, but I can tell
10 you that at least a 1/4 and probably more like a 1/3
11 of the 200 people who registered for the webinar were
12 not representing a state or federal agency, or the
13 private sector.

14 Here's a question from Don L., future
15 developments in storage and/or disposal will make this
16 200-year period a huge waste of manpower and
17 resources. I suggest that you reconsider the timespan
18 to periods of 50 years at most since technology will
19 change dramatically during that period. For example,
20 think back 50 years from today.

21 MS. PINEDA: Yes. I agree that we are
22 going to be speculating, but we do our site-specific
23 licensing EISs for the period of 40 years for storage,
24 so that would be covered under the site specific. So
25 the burden of this really is just to get a sense, sort

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1 of a big picture sense, of, if you're going to store
2 spent fuel and high-level waste for longer periods,
3 where might you see significant impacts?

4 And as I mentioned, some of those things
5 that can be quantified more easily are things like
6 land use, and exposures to workers, exposures to the
7 public, and costs associated with managing the spent
8 fuel, and making sure it's managed safely, and
9 repackaged as needed, and as often as needed.

10 MR. RUBENSTONE: And again, it's important
11 to remember that the purpose of an Environmental
12 Impact Statement is to take a hard look at the
13 situation and look at the potential impacts. It's not
14 to make predictions about how things will occur. And
15 if technology has changed, then the impacts may or may
16 not change, and that will be assessed as things
17 change.

18 I can understand suggestions that, where
19 perhaps 200 years is too big an analytical period, but
20 that's a decision based on, you know, what we think we
21 can reasonably analyze.

22 MS. JANAIRO: Okay. We do need to wrap up
23 in about three minutes, so we're just going to ask a
24 few more questions and then all these questions will
25 be preserved in Goto Webinar and we'll do what we can

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1 to make sure the NRC staff can provide answers in some
2 fashion.

3 Here is a question from Joseph Block, will
4 the NRC consider utilizing existing studies on the
5 robustness of fuel transportation casks with regard to
6 terrorism concerns? It seems like the current studies
7 already satisfy terrorism concerns.

8 MS. PINEDA: In that analysis, we are
9 going to use existing information to the extent that
10 we can. I think you might be referring to the risk
11 study it's called sometimes, but yes, we would be
12 using that information.

13 MS. JANAIRO: Okay. And here's a question
14 from Sven Bader, for the scenarios considering
15 regional and centralized/consolidated storage, will
16 these be considered exclusively dry storage
17 facilities, pool and dry storage facilities, or
18 exclusively pool storage facilities?

19 MS. PINEDA: They would be considered
20 exclusively dry storage facilities. The pool storage
21 that we consider -- well, actually, I'm not sure if we
22 would assume that pools would need to be located at
23 those facilities for maintenance, but certainly, the
24 main storage made at those facilities would be dry
25 storage.

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1 If there are pools there it would be for
2 maintenance, but any pool storage that we're going to
3 be looking at will be for the at-reactor storage site
4 scenario.

5 MS. JANAIRO: Okay. Written question from
6 Bob Halstead, in developing composite sites, will you
7 identify the specific sites from which actual data was
8 obtained for use in composite site impact assessment?

9 MS. PINEDA: Yes. That would be part of
10 our methodology, so while it might not be in the EIS
11 itself, there would be supporting information that
12 would show what our process was to derive those
13 composite generic sites.

14 And actually, going back to the pools real
15 quick, I know there's one, I think, GE Morris that is
16 pool storage, so of course, that might be the, sort
17 of, oddball case where we have to consider pool
18 storage that's not at an operating reactor site.

19 MS. JANAIRO: Okay. And then we have a
20 comment from Charisse Roller, your seven-year schedule
21 is too long. Check your assumptions, work scope
22 options, et cetera, to improve/shorten the schedule.
23 In all likelihood, conditions will change before you
24 finish in 2019. And then -- go ahead. I'm sorry.

25 MS. PINEDA: I was just going to say, yes,

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1 it's true that things could change. This end date is,
2 I believe, to be consistent, or to be going in
3 parallel, with the technical activities that are
4 ongoing so that the EIS can incorporate some of that
5 information down the road. So it is partly dependent
6 on the technical activities.

7 MS. JANAIRO: Okay. And then finally,
8 from Gene Stone, and my apologies to anyone who has a
9 question that did not get answered, will there be
10 public hearings on this or is the webinar today it?
11 If that is the case, how fair is that to the public?

12 MS. PINEDA: There won't be public
13 meetings specifically on this report. It's the
14 webinar, but, as I mentioned, we haven't even begun
15 the formal NEPA process, and when we announce the
16 NRC's intent to develop an EIS, we'll announce that in
17 the Federal Register and it will go out to our
18 distribution, and it'll be on the Web site, and at
19 that point, we'll have begun the formal NEPA process,
20 and we will certainly be having several public
21 meetings, and probably other smaller group meetings,
22 as well as, I'm sure, several webinars.

23 So this is just a very preliminary
24 outreach to get feedback on our early concept of the
25 EIS.

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1 MS. JANAIRO: Okay.

2 MR. RUBENSTONE: If I could just close
3 out, Lisa?

4 MS. JANAIRO: Sure, yes, Jim.

5 MR. RUBENSTONE: And that's a good thing
6 to build off of. As I said at the beginning, this is
7 the beginning of the webinar. We're in the early
8 stages of this process. We haven't begun the formal
9 NEPA steps, which include a fair amount of public
10 meetings, so people shouldn't think that this is their
11 only opportunity.

12 But at the same time, because one of the
13 reasons we put this preliminary report out for
14 comments, was to spark some discussion and get
15 people's public impressions of where we now think
16 we're going. This is subject to revision and change
17 as the process moves forward. And certainly as the
18 national scene evolves, we will take that into
19 consideration.

20 So I would just urge folks, especially if
21 you didn't get a chance to get your question in here,
22 to get us comments to that Web site, and I think we're
23 displaying the Web site here for public involvement.
24 There's a link there to the email address for
25 submitting comments. You can also submit comments in

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1 writing, and how to submit that is on the Web site as
2 well.

3 So I would definitely encourage people to
4 get their comments in early on this initial report.
5 We will be finalizing this based on the comments and
6 then moving into the next phase, but public
7 involvement is a big part of our plans going forward.

8 And I'd like to thank everyone who
9 participated. I'm not going to attempt to recap all
10 the questions, because there were a large number of
11 them, and I think it was a good discussion, and thank
12 the Council of State Governments for co-hosting this
13 with NRC.

14 MS. JANAIRO: Sure. Okay. Well, this is
15 Lisa Janairo. Later this week watch for a follow-up
16 message, which will have a link to the webinar
17 recording and that recording will be on the Goto
18 Webinar Web site. It'll eventually make it on to this
19 NRC public meetings page, but if you want to view it
20 before then, your best bet is the Goto Webinar link
21 that you'll get.

22 And please remember to fill out the brief
23 survey that'll pop up at the end of the webinar. This
24 concludes our webinar. Have a great week everyone.

25 (Whereupon, the meeting in the above-

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Responses to Unanswered Typed Questions from January 31, 2012 Webinar on Draft Report of Long-Term Waste Confidence Update

Could a potential outcome of this activity be different Waste Confidence timeframes for dry and wet storage of used nuclear fuel?

The current Waste Confidence decision expresses confidence in the safety of spent fuel storage, in a combination of wet (spent fuel pools) and dry (cask systems) storage modes. It is possible, based on the results of the EIS and the technical research being conducted over the next few years, that the NRC could make a conclusion about the safety of storage for certain lengths of time specifically in spent fuel pools or dry casks.

However, it is not likely that NRC would separately address wet storage time and dry storage time in the Waste Confidence EIS. If changes in licensing periods for dry or wet storage are determined to be necessary to ensure safety or security, these would be addressed under the reactor and storage regulatory programs in 10 CFR Part 50 (for spent fuel pool storage) and 10 CFR Part 72 (for dry storage).

Will an application for a long term solution such as Yucca Mountain be impacted by this EIS study?

The EIS being developed for the potential update of the Waste Confidence Rule has no impact on any specific application or other licensing action by NRC. The primary purpose of the EIS is to develop an understanding of the possible significant environmental impacts of extended storage. The staff cannot speculate whether and in what manner the Commission would revise the Waste Confidence decision based on the EIS results.

Is the NRC limiting design basis threats to ISFSIs based on an acceptable dose at the boundary of the Owner Controlled Area? If so, what is that dose?

This question refers to NRC's security requirements for dry storage. Design basis threats to an ISFSI are not based on dose, but rather on credible and likely capabilities of adversaries. Licensees design, develop, and implement physical security protection systems and programs to meet the NRC's physical protection requirements (10 CFR 73.55). The NRC staff uses potential adversary characteristics in conjunction with the physical protection requirements to assess the acceptability of the systems and programs. The NRC is in the process of proposing a rulemaking that would revise the agency's security requirements for the storage of spent nuclear fuel. The NRC has received significant public comments on a draft regulatory basis document, which considers in part a dose-based approach at the site boundary. Further information about this rulemaking activity is available at this web site:

<http://www.nrc.gov/about-nrc/regulatory/rulemaking/potential-rulemaking/isfsi-security.html>

Were Depleted Uranium shells fired at the dry casks from AWOL A-10 warthog pilots

specifically considered? Someone stole a tank here in San Diego, drove it for miles over cars and onto the highway... and our own Congressman, Randy Cunningham, a former Navy pilot, went on a dangerous tear and went to jail too, so this is a fair consideration.

The staff will consider a range of terrorism scenarios such that the impacts described in the EIS will be bounding. Some scenarios similar to the one described by the commenter have been evaluated already in a number of analyses, and most of the analytical information for this work is classified. Some of these analyses, for example, consider the releases as a result of attacks in which a wide range of high energy charges impacted a range of transportation systems. NRC also evaluated the impact of jet aircraft on storage casks for the Private Fuel Storage license application and the effects of a 100-foot drop on a storage cask. In addition, studies conducted in the U.S. and in Germany involved the firing of charges at casks and an evaluation for releases. The NRC has used the results of these analyses in its security assessments for transportation casks.

Thank you for answering my first question, although you specifically mentioned "pool-to-pad" several times and I was specifically talking about going in and finding problems 300+ years from now! I hope my second question will be answered a bit more specifically...

The EIS will make assumptions based on available technical information about how often fuel might need to be repackaged to ensure a safe condition and compatibility with transportation requirements. One possible assumption might be that the cask is left untouched until it needs to be moved for transportation. Another assumption might be that the cask is repackaged several times during its time in storage and before being transported to a disposal facility. These assumptions for the EIS will not reflect the NRC's actual requirements for casks, because they are intended to cover the credible range of impacts for consideration in the EIS.

Research programs for extended storage and transportation being implemented by the NRC, U.S. Department of Energy, and others address potential technical issues that could affect the safety of long-term storage and transportation. The NRC may grant 40-year extensions of an ISFSI storage license if the licensee provides sufficient information for NRC staff to determine that the condition of the storage system is suitable for continued safe and secure storage. As part of its renewal, the licensee must have a suitable aging management and monitoring plan in place to predict, identify, and repair any damage that might occur during the period of that extension.

I am concerned about the economic impact of a dry cask facility that relies on a backup capability for emergency response at the pad that was not part of the original plant or renewed license for the plant proper.

The EIS will consider the costs of long-term storage, including major considerations relating to maintenance, security, and emergency response. For the EIS analyses, the

staff will need to identify an assumption that provides for long-term emergency response funds and capabilities over the long-term.

The NRC's requirements for financial assurance and recordkeeping for ISFSIs are provided in 10 CFR 72.30. Currently, these requirements do not include a provision for maintaining emergency response capabilities or funding for an ISFSI that remains after a plant is decommissioned.

I know you do not want to be site specific, but Oyster Creek is scheduled to close in 8 years....what happens 53 years from now? Who is responsible in case of damage or leak at the dry casks?

The Oyster Creek reactor operating license expires in 2029. If the licensee decommissions the plant, it may choose to leave the ISFSI in place and maintain a license to store spent fuel. The term of an ISFSI storage license is 40 years. The NRC may grant 40-year extensions of a license, but only if the licensee provides sufficient information for the NRC staff to determine that the condition of the storage system is suitable for continued safe and secure storage. As part of its renewal, the licensee also must have a suitable aging management and monitoring plan in place to predict, identify, and repair any damage that might occur during the period of that extension. The licensee has the continuing responsibility for the safety and security of the stored fuel, with NRC oversight.

Who will compel the licensees to transfer spent fuel rods from wet to hardened cask storage promptly? And who will enforce the timetable? How much radioactive waste is too much at a seismically-active site? Safe storage "will be available." This has been told to the public since before all the plants were built. We have NO confidence in this. If waste confidence is NOT a regulatory program, where IS the regulatory program located?

The licensee has the responsibility to manage spent fuel at its site, in accordance with NRC's regulatory requirements. Under current practices, licensees generally move fuel from wet storage to dry storage to accommodate new spent fuel from the reactor. NRC's requirements address the safety and security of fuel in both dry storage and spent fuel pools. Seismic risks, along with other natural hazards, accident scenarios, and intentional acts, are taken into consideration in NRC's licensing and regulation of casks and dry storage facilities. Licensees must show that they can store the spent fuel in accordance with NRC requirements, regardless of where the fuel is stored.

The NRC's regulatory program for spent fuel storage and transportation is implemented through the regulations at 10 CFR Part 50 (reactor operations, including spent fuel pools), 10 CFR Part 71 (transportation) and 10 CFR Part 72 (dry storage). Waste Confidence is a statement of general confidence in the safe management of spent fuel; it neither authorizes nor prohibits the storage of spent fuel.