

Official Transcript of Proceedings

NUCLEAR REGULATORY COMMISSION

Title: Public Meeting to Discuss Commission
 Direction on SECY-12-0110, "Consideration
 of Economic Consequences within the
 U.S. Nuclear Regulatory Commission's
 Regulatory Framework

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1 UNITED STATES OF AMERICA

2 NUCLEAR REGULATORY COMMISSION

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4 PUBLIC MEETING TO DISCUSS COMMISSION DIRECTION

5 ON SECY-12-0110, "CONSIDERATION OF ECONOMIC

6 CONSEQUENCES WITHIN THE U.S. NUCLEAR REGULATORY

7 COMMISSION'S REGULATORY FRAMEWORK

8 + + + + +

9 MONDAY,

10 JULY 29, 2013

11 + + + + +

12 ROCKVILLE, MARYLAND

13 + + + + +

14 The public meeting convened at the
15 Nuclear Regulatory Commission, Three White Flint
16 North, Room 1-C03, 11601 Landsdown Street, at 2:00
17 p.m., Joan Olmstead, Facilitator, presiding.

18 NRC STAFF PRESENT:

19 JOAN OLMSTEAD, OGC, Facilitator

20 ALYSIA BONE, NRR

21 LAWRENCE KOKAJKO, NRR

22 GLENNA LAPPERT, NRR

23 PATRICIA (TRISH) MILLIGAN, NSIR

24 DONALD PALMROSE, NRO

25 RICHARD (FRED) SCHOFER, NRR

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

(2:01 p.m.)

OPERATOR: Welcome, and thank you for standing by. At this time, all participants are on listen-only mode until the question and answer session on the phone. To ask a question during that time, please press star then one.

I'd now like to turn over the meeting to Joan Olmstead. You may begin.

FACILITATOR OLMSTEAD: Good afternoon, everyone. I just want to thank you and welcome you to our discussion of the consideration of economic consequences following potential radiological release.

My name is Joan Olmstead. I'm a member of the NRC's in-house facilitators board, and I'll be serving as the facilitator for today's meeting. My role is to help ensure that today's meeting is informative and productive.

This is a Category 3 meeting to encourage active participation and information exchange with the public. The NRC staff will provide information regarding the Commission's direction on consideration of economic consequences and solicit comments on what could be potential policy issues that should be

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1 considered as the staff develops a paper for the
2 Commission on this topic.

3 The feedback the NRC receives today is
4 not considered formal public comments, and the NRC
5 will not provide written response to these comments.

6 The agenda for today's meeting contains time to
7 discuss several items including what level of
8 decontamination should be considered in the cost-
9 benefit analysis, what discount rate should be
10 considered, and whether we should consider evaluating
11 accident effects beyond the 50-mile radius.

12 We are also interested in receiving
13 public input on other potential policy issues to
14 consider in developing the Commission paper on this
15 topic.

16 Comments on specific licensing actions
17 are considered outside the scope for today's public
18 meeting. There are other ways to comment on specific
19 licensing actions, including during public meetings,
20 commenting on environmental reviews or other NRC
21 documents that deal with a specific licensing action.
22 We can also receive general comments or questions on
23 NRC activities, and they can be directed to
24 opa.resource@nrc.gov. And for non-economic
25 consequences, Fukushima-related comments and

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1 questions can be directed to
2 Jldpublic.resource@nrc.gov.

3 Are there any questions about the agenda?

4 (No response.)

5 Okay. Before we get into the meeting
6 specifics, I will go over some logistics. Hopefully,
7 everyone signed in and received copies of the agenda,
8 presentation slides, and a feedback forum. If you
9 haven't sign in, the sheets are near each entrance.

10 And for those of you on the phone who
11 haven't signed in, please be sure to contact Alysia
12 Bone or Glenna Lappert to ensure we have your contact
13 information. You can get Alysia's and Glenna's
14 contact information on the meeting announcement.

15 Slides for this public meeting are
16 available through the Agency-wide Documents Access
17 and Management System, ADAMS, at accession number
18 ML13196331. Additionally, for background on the
19 subject for the public meeting, you can see the SECY
20 paper, S-E-C-Y, dash 12-0110, found in ADAMS at
21 ML12173A479. And the Commission SRM on the SECY is
22 found at ADAMS at ML13079A055.

23 All webconferencing participants that
24 wish to ask questions or give comments can type them
25 into their computer. As previously mentioned,

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1 participants on the teleconference line can press
2 star one and tell the operator they would like to ask
3 questions or give comments. I will make sure to ask
4 the operator if there are people that have questions
5 or comments during our discussion periods for this
6 meeting.

7 This meeting is being transcribed, so in
8 order to get a clean transcript and minimize
9 distractions during the meeting, we ask that you turn
10 off or mute anything that rings, buzzes, beeps, or
11 has an alarm. Please try to minimize loud side
12 conversations, and we only request to have one
13 speaker at a time.

14 Let's see. Now, because this is a bit of
15 a challenging audio situation in this room, we only
16 have the speakerphone. The microphone has a lot of
17 echo and feedback. So if you do want to speak or ask
18 questions, if you are in the room, I'm going to ask
19 you to come up here to be closer to the speakerphone.

20 Let's see. Restrooms are outside this
21 door. Turn to the right, there is an entryway for
22 the cafeteria, and there is restrooms there. If we
23 have to evacuate, please follow the directions from
24 the security officers.

25 And, finally, we are always looking for

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ways to improve our meetings, and your feedback is important to us. So at the end of the meeting please complete the feedback forms and return them to us. There were some outside with the other meeting announcements and notifications, and you can find copies there.

And if you want, if you are on the phone you can contact me at 1-301-415-2859, and I will get you a copy of the feedback form, too, and you can send it back to us and it's postage-free.

Are there any questions on logistics?

OPERATOR: If you would like to ask a question, please press star then one.

(No response.)

FACILITATOR OLMSTEAD: Okay. All right. I guess we don't have any questions. So --

OPERATOR: No questions.

FACILITATOR OLMSTEAD: Okay. Then, we will have -- at this point I will ask the people at the front of the table from NRC to identify themselves. For participants on the teleconference and the webinar, I will ask them to identify themselves if they choose to speak later in the meeting.

MR. PALMROSE: I'm Don Palmrose, Senior

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1 Reactor Engineer with the Office of New Reactors, the
2 Radiation Protection and Accident Consequence Branch.

3 MS. MILLIGAN: Trish Milligan, Division
4 of Preparedness and Response for NSIR.

5 MS. BONE: Alysia Bone, Project Manager
6 in the Office of Nuclear Reactor Regulation in the
7 Division of Policy and Rulemaking.

8 MR. SCHOFER: Fred Schofer, Office of
9 Nuclear Reactor Regulation, Division of Policy and
10 Rulemaking.

11 FACILITATOR OLMSTEAD: And Lawrence --

12 MR. KOKAJKO: Lawrence Kokajko.

13 FACILITATOR OLMSTEAD: -- Kokajko will be
14 giving us our opening remarks, and please introduce
15 yourself, too.

16 MR. KOKAJKO: Okay. My name is Lawrence
17 Kokajko, and I'm the Division Director for the
18 Division of Policy and Rulemaking in the Office of
19 Nuclear Reactor Regulation. I'd like to welcome all
20 of you for participating in today's public meeting on
21 how NRC considers the economic consequences following
22 radiological release.

23 Alysia will go over some of the context
24 and focus of today's meeting, but, first, I'd like to
25 first mention that this is a very important topic to

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1 the NRC. In the time following the accident at
2 Fukushima Daiichi, the NRC formed a multi-office
3 working group to analyze the methods the NRC
4 currently uses to address economic consequences such
5 as offsite property damage.

6 Subsequently, NRC conducted multiple
7 public meetings and provided a vote paper to the
8 Commission on this topic. And as mentioned
9 previously, that paper is SECY-12-0110, and it is
10 publicly available.

11 The Commission recently responded to this
12 paper, and we are working to meet Commission
13 direction. The purpose of today's meeting is to go
14 over this direction and focusing on the task to
15 provide an additional vote paper on the staff's plans
16 for updating cost-benefit guidance.

17 Additionally, we would like to use this
18 forum as a way for you to ask us any clarifying
19 questions, as well as provide us your thoughts on
20 what we should be considering as we update our
21 guidance. We reserved time following the main
22 presentation for general discussion to obtain your
23 feedback.

24 We look forward to having a good
25 discussion today, but please note we do not plan to

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1 provide written responses to comments. We will use
2 this general discussion section of this meeting
3 largely as a brainstorming session, capturing issues
4 and topics you believe important. Though we cannot
5 guarantee all of the items we discuss today will be
6 covered in the upcoming vote paper, your input will
7 be integral to helping us to develop the document.

8 Thank you again for your participation,
9 and with that I'd like to turn it over to Alysia to
10 begin the staff's presentation.

11 MS. BONE: Thank you, Lawrence. Thank
12 you, Joan. If we could go to Slide 4, please.
13 Slides 2 and 3 we covered, the logistics and ground
14 rules for today's presentation.

15 And on Slide 4 I would just like to
16 reiterate some of Lawrence's points about the purpose
17 of today's meeting. First, as we mentioned, it is
18 really to provide information on the Commission's
19 direction contained in the SRM for SECY-12-0110,
20 "Consideration of Economic Consequences Within the
21 U.S. Nuclear Regulatory Commission's Regulatory
22 Framework." And then we will allow some time for
23 questions about this direction, any background
24 questions.

25 And then, what we would really like to do

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1 is focus the remaining portion of the meeting -- to
2 open it up for general discussion on what you think
3 should be in the paper that we are writing in
4 response to this Commission direction.

5 So on Slide 5 we have an outline for this
6 meeting, and in the first -- the first 12 or so
7 slides I'd like to go pretty quickly, kind of cover
8 in about 20 minutes or so, this is all general
9 background information and kicking it off to our
10 general discussion. The reason we want to go through
11 this rather quickly, again, is to really start to
12 have some time to develop some good discussion on
13 some of these topics.

14 So first I will quickly go over some
15 context for the meeting. Then, I will provide a
16 quick summary of the NRC's legal authority to
17 consider property damage. It's a slide that we like
18 to refresh every time we discuss this topic at the
19 past couple of meetings, and as we -- every time we
20 introduce this topic.

21 Then, I will quickly go over the
22 Commission paper on economic consequences, SECY-12-
23 0110, remind everybody what was contained in that
24 paper. And then, in the last three bullets here on
25 this outline, I'm going to talk about the upcoming

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1 things, the new things, the Commission direction and
2 recap that, as well as discuss the staff's
3 preliminary approach, what we think at this point --
4 our direction is at this point to respond to that
5 Commission SRM. And then we will open it up for
6 questions and general discussion.

7 So on Slide 6 I am going to provide some
8 context for this meeting, where this topic came from,
9 where we have gone in the past year, and where we are
10 going. As a reminder, the accident at Fukushima
11 Daiichi in March of 2011 initiated discussion of how
12 NRC considers economic consequences caused by a
13 significant unintended radiological release from NRC-
14 regulated activity.

15 As a result of this discussion, the staff
16 received a tasking in April of last year to provide a
17 vote paper to the Commission in August. In the
18 staff's effort to meet that direction, to provide
19 that Commission paper, we held several stakeholder
20 interactions, we formed an interagency or across-the-
21 agency working group that -- with representatives
22 from all of the program offices, from our Office of
23 General Counsel, and the Office of Research.

24 We had public meetings last May and last
25 August, and then we held a public Commission briefing

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1 in September of 2012. Additionally, we had two
2 Advisory Committee on Reactor Safeguards (ACRS)
3 briefings, one in October and one in November of
4 2012.

5 Amidst these interactions, the staff did
6 submit SECY-12-0110 on August 14th of last year, and
7 recently, in March of 2013, the Commission provided
8 direction on SECY-12-0110.

9 Today's meeting is an opportunity for
10 public engagement on this topic as we go forward.

11 Slide 7. As a reminder of NRC's kind of
12 role in this entire discussion with regards to legal
13 authority, first, NRC requirements relating to
14 adequate protection concern radiological health and
15 safety and common defense and security. NRC must
16 find reasonable assurance of adequate protection
17 before it can issue a license or amend a previously
18 issued license, and this is before economic
19 consequence considerations. Adequate protection is a
20 safety standard. I just want to emphasize that.

21 The second bullet, though, is a reminder
22 that distinct from adequate protection, the NRC does
23 have the authority under the Atomic Energy Act to
24 minimize danger -- and that's a direct quote from the
25 AEA -- minimize danger to property. Within the NRC

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1 guidance, we have specified a term called offsite
2 property damage.

3 There is also onsite property damage, but
4 largely for this discussion, as it was raised last
5 year, we focused in on offsite property damage, which
6 can include costs of damage and destroyed property,
7 relocation costs, and loss of business revenues.

8 So that provides background on our legal
9 authority.

10 Moving right along, then, on Slide 8,
11 this is a reminder of what the staff submitted on
12 August 14, 2012, the SECY-12-0110. This vote paper
13 addressed the policy question, "To what extent, if
14 any, should NRC's regulatory framework be modified
15 regarding its consideration of the economic
16 consequences of an unintended release of licensed
17 nuclear materials to the environment?"

18 I know that's quite a mouthful. It's a
19 long purpose statement, but these words were
20 carefully selected to really hone in on what we mean.

21 Specifically, I'd like to just point to unintended
22 release. Really, the scope of this paper focused in
23 on unintended releases. Sabotage events, intentional
24 releases, were beyond the scope of this paper.

25 In this paper, the staff described the

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1 current ways that the NRC does consider offsite
2 property damage in various NRC analyses. And as a
3 reminder, we focused on regulatory analysis,
4 backfitting analysis, and environmental analyses
5 conducted under NEPA, which within these cost-benefit
6 determinations of all of these analyses offsite
7 property damage is considered.

8 Again, all three of these analyses have
9 different purposes and come from different reasons,
10 but the common thread is that they all do have cost-
11 benefit determinations and consider offsite property
12 damage.

13 Based on this information that the staff
14 put in this -- in SECY-12-0110 background
15 information, the paper concluded that the current
16 regulatory framework is sound and affords sufficient
17 flexibility to consider economic consequences. Staff
18 then recommended that we do enhanced cost-benefit
19 guidance and recommended this option to the
20 Commission.

21 As Joan I think already mentioned, we
22 have the ADAMS accession number at the bottom of this
23 slide for background.

24 So moving on to Slide 9, I know I went
25 through those slides very quickly, but all of that is

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1 information that we have covered previously or were
2 in the paper. So starting with Slides 9 and 10,
3 which is forward-looking since we have last met, the
4 Commission did provide direction on this SECY paper
5 in March of this year.

6 This SRM directed that the NRC's current
7 approach to the issue of land contamination from
8 reactor accidents is sound. And the Commission then
9 also specified that the staff may continue with
10 ongoing efforts to update guidance documents within
11 the current regulatory framework. And these were
12 explicitly mentioned in the SECY.

13 But as a reminder, they are an update to
14 the dollar per person-rem conversion factor policy,
15 and an update to replacement energy costs. Both of
16 these activities were underway prior to the SECY
17 paper and are continuing efforts at the NRC.

18 On Slide 10, these five bullets really
19 are the tasks that the staff has extracted from that
20 SRM that we are pursuing right now. Before I go --
21 I'm going to go over all five of these tasks, but I
22 would just like to mention that the first bolded task
23 is the focus of today's meeting.

24 Really, the next step that the NRC is
25 looking at right now, and, really, where we want to

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1 get your feedback was this first bulleted -- bolded
2 bullet, which is the Commission directed the staff to
3 develop a notation vote paper on plan for updating
4 regulatory analysis guidance.

5 In the next slide, I'm going to go
6 through what we look at -- what we are thinking that
7 preliminary plan is at this point, but I'm just going
8 to highlight at this point that that is one of our
9 tasks.

10 Another task is to describe how costs and
11 benefits are addressed for different types of NRC-
12 regulated activities. I think the SRM itself said
13 regulatory gap analysis, but, really, what we are
14 trying to say here is the difference -- the different
15 ways that the staff considers costs and benefits for
16 reactors, materials, fuel cycle facilities, et
17 cetera.

18 Third task, document comparison of U.S.
19 and Japanese regulatory requirements in effect at the
20 time of the Fukushima accident.

21 The fourth bullet, to report a plan to
22 dissolve the Near-Term Task Force Steering Committee.

23 And the fifth task within this SRM is to
24 provide any cost-benefit model developed for use in
25 guidance documents to address offsite property

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1 damage.

2 So before I go to the next slide, which
3 is going to kind of circle back around to that first
4 bullet and the focus of today's meeting, are there
5 any questions at this point over background material,
6 the recap of the SRM?

7 OPERATOR: Once again, to ask a question
8 please press star then one.

9 (No response.)

10 MS. BONE: Okay.

11 FACILITATOR OLMSTEAD: Are there any
12 questions for the webinar?

13 OPERATOR: We do have one coming up. One
14 moment. Ma'am, your line is open.

15 MS. LAMBERT: Yes. Hello. This is Mary
16 Lambert with Pilgrim Watch in Massachusetts. On
17 Slide 8, the term "only unintended release," does
18 that specifically mean not consideration of acts of
19 malice?

20 MS. BONE: Thank you for your question.
21 Within this paper itself, we did not consider acts of
22 malice. We did not consider intentional releases, if
23 you will, sabotage events. We did have closure I
24 believe that talked to some of the ongoing staff
25 activities resulting -- or along the lines of this

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1 topic, but when it came to providing options, et
2 cetera, we were really focusing on unintended
3 releases.

4 MS. LAMBERT: But aren't you focusing on
5 economic consequences? And isn't it really beside
6 the point whether the offsite releases bringing about
7 economic consequences were caused by an equipment
8 failure, for example, a natural event, or a terrorist
9 event? I don't understand the rationale.

10 MS. BONE: Thank you. I appreciate the
11 question yet again, but I think for this paper we --
12 given the tasking, given the impetus being the
13 Fukushima Daiichi event, we were trying to hone in on
14 a specific scope, and that did include unintentional
15 releases. That was just the purpose of that specific
16 paper. I don't know if my colleagues want to follow
17 up with anything.

18 MR. SCHOFER: Hello, Mary. This is Fred
19 Schofer, NRR. With regard to only unintended
20 releases, and does this exclude acts of malice, with
21 regard to the -- I guess the guidance for regulatory
22 analysis and how we perform it, there wouldn't be any
23 difference between a reactor accident that is caused
24 by either natural events or equipment failure, or the
25 consequences from, let's say, an act of malice.

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1 The primary difference that it would feed
2 into the analysis is the likelihood of the event.
3 But once an event such as that occurs, that causes a
4 perturbation to operation to results in an accident
5 and an accident sequence. Then, our modeling would
6 be comparable.

7 MS. LAMBERT: So, in other words, you
8 could get rid of the word "unintended." In an
9 application problem, if there were offsite
10 consequences due to an act of malice, then what would
11 be the justification for a licensee to use any
12 recommendations and updates in their cost-benefit
13 analysis?

14 MR. SCHOFER: I think our original intent
15 of unintended was to differentiate between normal
16 operation and an accident sequence.

17 MS. LAMBERT: Yeah. That makes sense. I
18 think that the recommendation clarified that in the
19 footnote.

20 MS. BONE: Thank you. I've made a note
21 of that recommendation. Appreciate it.

22 MS. LAMBERT: And Slide 9, it seems to be
23 focused on land contamination. And is aqueous
24 discharges then not being considered? Sorry to ask
25 these questions. That's the last one presently.

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1 MS. BONE: No, I appreciate that. This
2 was a --

3 MS. LAMBERT: I think it was on Slide 9.
4 I don't --

5 MS. BONE: Oh, yes. Yes, yeah. They are
6 included. They are included.

7 MS. LAMBERT: Okay. Good. Thank you.

8 MS. BONE: Yep.

9 OPERATOR: We have no further questions.

10 FACILITATOR OLMSTEAD: Do we have any
11 other questions from the webinar? Does anybody in
12 the room have any questions?

13 (No response.)

14 MS. BONE: Oh. And, Glenna, there was
15 one question about the ADAMS accession numbers.
16 Okay.

17 MS. LAPPERT: That was it.

18 MS. BONE: All right. Great. And in our
19 meeting summary we will make sure that all of our
20 references and all of the accession numbers are also
21 in the meeting summary.

22 Okay. Going back on Slide 11, as a
23 reminder, on Slide 10 we discussed that one of our
24 tasks and focus at this meeting is this notation vote
25 paper on plan for updating regulatory analysis

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1 guidance which is due -- you can see on Slide 11
2 right now it is due to the Commission the end of this
3 year.

4 And what this is going to be is a very
5 high-level plan for updating cost-benefit guidance
6 documents. We have on one of our backup slides and
7 in other presentations we have a list of some of the
8 cost-benefit guidance documents that the staff is
9 currently using.

10 And right now we are anticipating that
11 this paper will describe a plan for updating some of
12 these documents as well as identify a potential set
13 of very broad policy issues, a potential set of
14 current methodological changes to tools and
15 methodologies used in cost-benefit guidance updates.

16 Again, as this meeting is -- we are, as
17 Lawrence mentioned, using this as a brainstorming
18 session within the working group, we have identified
19 some topics and some items of potential discussion as
20 we are thinking about our plan to update the guidance
21 documents in the years to come. But we want to hear
22 from you what some ideas and thoughts and
23 recommendations are. Again, this paper is slated to
24 be due at the end of this year.

25 Slide 12 describing a little bit more of

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1 what we are looking at this high-level plan that we
2 are going to transmit in the SECY paper. At this
3 point, this plan includes these topics. We are
4 looking at completing the update to replacement
5 energy guidance, which we mentioned in the last SECY
6 paper. The staff is still pursuing this update. We
7 are also planning to complete the update to the
8 dollar per person-rem conversion factor policy.

9 In addition, we will pursue non-policy
10 revisions to the regulatory analysis guidance, NUREG-
11 BR-0058, and the technical handbook, which is NUREG-
12 BR-0184. These non-policy revisions are basically
13 cleaning up these documents, making sure that the
14 definitions are consistent throughout, making sure
15 that pointers are the way that they should be, making
16 sure everything is just generally updated, but these
17 revisions wouldn't necessarily rise to the level of a
18 policy change.

19 Then, the plan would be identification of
20 differences in guidance for different NRC-regulated
21 activities. This points back to one of the tasks
22 from the SRM that we had mentioned before -- the
23 identification of these differences in this
24 regulatory gap analysis.

25 Once this identification is performed,

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1 after that, whatever this exercise would uncover or
2 whatever that would lead to may then have us create a
3 plan to implement further guidance changes. So you
4 can see that this is a multi-year effort. This is
5 looking high-level plans for the future, but this
6 right now is our general idea of what we think we are
7 going to include in the SECY paper.

8 So moving along to Slide 13, this is
9 where I think we are going to devote the rest of this
10 meeting. We have a good hour and a half, and really
11 what we are looking for here is, again, in the
12 working group level we have identified potential
13 topics that the staff might pursue as we update cost-
14 benefit guidance.

15 There is no guarantee at this point that
16 these are going to be the ones that are going to be
17 included in our SECY paper, but this is sort of to
18 get the ball rolling, to help us think what we could
19 -- particular important points to consider as we
20 pursue these updates.

21 What we will go through now is I will
22 turn it over to our three subject matter experts that
23 are going to cover each of these bullets in depth and
24 spend, you know, 15 or 20 minutes kind of really
25 having a good discussion on these specific topics.

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1 But then we will open it up to other points of
2 consideration that you would like to include.

3 Again, a topic, if you think that any of
4 these rise to the level of policy issues, if you have
5 particular feedback on some of these sub-bullet focus
6 questions.

7 So before we turn it over, are there any
8 questions for just kind of logistically what we are
9 looking for, how we are going to continue with this
10 discussion?

11 (No response.)

12 Okay. Then I am going to turn it over to
13 Trish Milligan to cover the first topic.

14 MS. MILLIGAN: Thank you. I'm going to
15 start off with talking about the decontamination
16 levels.

17 The staff requirements memorandum for the
18 SECY that Alysia has been talking about, 12-0110,
19 stated that the development of implementation of
20 approaches for Option 2 will likely expose policy
21 issues, during the staff's efforts to improve
22 guidance for estimating offsite economic
23 consequences, or to identify potential areas to
24 develop new guidance as needed for applications. The
25 use of a particular decontamination level was one

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1 example of a potential policy issue that was
2 identified.

3 The current NRC regulations and guidance
4 on decontamination or cleanup is focused primarily on
5 the decommissioning of fixed facilities and
6 establishes 25 millirem per year as an upper bound
7 for unrestricted release, and under special
8 conditions for restricted use, and with the ability
9 to provide for enduring institutional controls, upper
10 limits of up to 500 millirem per year are allowed.

11 The public dose limit from operating
12 facilities, such as a nuclear powerplant, is 100
13 millirem per year. These are our Part 20 limits.

14 For incidence and accidents with
15 widespread releases, such as the accident at
16 Fukushima, criteria for decontamination and cost-
17 benefits are not yet established. The Federal
18 Government, with the publication of the Department of
19 Homeland Security's Protective Action Guidelines for
20 Improvised Nuclear Devices and Radiological
21 Dispersion Devices, as well as the newly released EPA
22 draft protective action guidance document, stresses
23 optimization in considering the effects of such a
24 release.

25 The International Council on Radiation

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1 Protection, in its Reports 103, 109, and 111, also
2 puts the focus on optimization with its consideration
3 on cost versus benefit. The costs are not
4 necessarily simply restricted to dollars but consider
5 broader societal impacts.

6 What we are seeking here today from you
7 is your thoughts on the establishment of
8 decontamination levels for cost-benefit analyses.
9 Should there be a fixed value? If so, what should
10 that value be? Should the value be defined for the
11 specific event or facility rather than a one size
12 fits all? How should optimization be considered in
13 this regard? Or should optimization be considered in
14 this regard?

15 And those are the questions that we are
16 looking for input for your thoughts on -- give us
17 information or to consider as we develop this paper.

18 And I open it up now for discussion. I
19 think that we probably have people with some good
20 thoughts on these issues.

21 FACILITATOR OLMSTEAD: Is there anybody
22 that wants to speak in the room on this topic?

23 (No response.)

24 Okay. How about on the webinar?
25 Nothing? Operator, can you check for the phone line?

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1 OPERATOR: Once again, to ask a question
2 please press star one. One moment. Mary, your line
3 is open.

4 MS. LAMBERT: Hello. I see no need for
5 many of us to repeat public comment that was already
6 submitted on the EPA PAGs, because it is directly
7 applicable here. I, for one, certainly disagreed
8 with the concept of coming up with a standard -- a
9 dose acceptability standard after the fact, because
10 then really what you are seeing is an economic
11 decision, not a health-based decision.

12 And that, too, would apply -- the comment
13 would apply to having different standards for
14 different reactor accident sites, because, again, it
15 is -- it boils down to what can be done. And let's
16 pretend it's all right for health and get people
17 "back to normal" -- what it appears obviously the
18 Japanese are doing, and it seems that is the case,
19 economics, not public health and safety, for the EPA
20 PAGs.

21 And so, again, for written comments, if
22 you're accepting them, I think it would be
23 appropriate to resubmit the comments that were sent
24 to EPA, but also to say that we are back again to the
25 core problem that there is no agreed-upon standard --

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1 number one, not an agreed-upon acceptance of who is
2 responsible after the fact to direct the MC for
3 cleanup, and certainly neither NRC, EPA, DHS, have
4 accepted responsibility or decided who is going to
5 pay. Certainly, Price-Anderson doesn't pay for
6 cleanup.

7 So that's my comment, and thank you for
8 the opportunity.

9 FACILITATOR OLMSTEAD: Thank you. Thank
10 you very much. Do you have a response?

11 MS. MILLIGAN: Mary, hi, this is Trish
12 Milligan. Did you have any thoughts on a structure
13 that you would think would be appropriate for the NRC
14 staff to consider in this regard?

15 MS. LAMBERT: Yes. I think EPA and NRC
16 should do their -- satisfy their statutory
17 responsibility to protect public health and safety
18 and come up with a health-based standard that is
19 based upon the most current accepted research, which
20 would be a BEIR 7, and you could also draw from the
21 research done by Cardis and the Techa River study.

22 That would be my comments. Because if
23 you don't have a standard beforehand, then it is
24 being driven by the reality. In a lot of situations
25 you are not ever going to meet that standard. And,

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1 therefore, the public is at risk for being duped,
2 that, oh, it's okay for the next 20, 30 years, when
3 it really isn't okay because that cancer rate isn't
4 okay for a chemical accident, for example. So that's
5 the very basic response.

6 MS. MILLIGAN: Mary, I lost your second
7 example. I didn't quite hear it. You gave two --

8 MS. LAMBERT: Well, I just EPA standard
9 for cancer for a chemical release.

10 MS. MILLIGAN: Now, you talk about --

11 MS. LAMBERT: If it's one in 100,000, and
12 then you start getting down to what is being talked
13 about as being the -- as the proposed standard or
14 NRC's current standard, it certainly is not one in
15 100,000 likely to get cancer.

16 And so the game can be as low as
17 reasonable achievable, which is not a standard; it's
18 a wish. And also, it should be based on the
19 recognition if you go to BEIR 7 that the standard
20 should be not on the reference mans but instead, as
21 Arjun Makhijani has very well described, on the most
22 vulnerable, on children, on women, who are more at
23 risk many times than the 30-year olds, healthy men,
24 sitting on the fencepost.

25 MS. MILLIGAN: Thank you, Mary. But I --

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1 one clarifying question. You gave us two -- examples
2 of two studies. One was BEIR 7, and then --

3 MS. LAMBERT: Oh, I'm sorry. Excuse me,
4 Trish. I didn't understand what you were saying.
5 one was Cardis study, and the other were the studies
6 on the Techa or -- yeah, Techa, T-E-C-H-A, accident
7 study.

8 MS. MILLIGAN: Okay.

9 MS. LAMBERT: These are discussed in
10 detail by Dr. Jan Beyea, B-E-Y-E-A, in his
11 consequence analysis provided for the Massachusetts
12 Attorney General in Pilgrim's license renewal
13 adjudication in May of 2006. So I would refer you to
14 that.

15 MS. MILLIGAN: Thank you.

16 MS. LAMBERT: And he indicates in the
17 consequence analysis, which is conservative, God
18 knows, because he used the MACCS2 code for it, where
19 the 2000 dollar is totally inadequate. So why don't
20 you go there, or I can email it to you. You can find
21 it on ADAMS, certainly.

22 MS. MILLIGAN: Yes. I know what studies
23 you're referring to. I can find them. Thank you
24 very much.

25 MS. LAMBERT: Okay. Thank you very much.

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1 FACILITATOR OLMSTEAD: Okay. Is there
2 any other people on the phone that want to comment or
3 ask questions?

4 OPERATOR: No further questions.

5 FACILITATOR OLMSTEAD: Anybody on the
6 web? Okay.

7 MS. LAPPERT: How will you evaluate
8 economic impacts to Indian lands? Indian lands are
9 different as they are held in trust for the benefit
10 of the Indian tribe by the Federal Government.

11 MS. MILLIGAN: We haven't made any
12 determinations on how we will look at any of these
13 things. What we would like, though, would be
14 guidance from the commenter on what they think -- she
15 thinks would be useful information for us to
16 consider, how to consider it, what kinds of numbers
17 or standards that they would feel to be appropriate.
18 So we would like that input very much.

19 We have no ideas right now previously of
20 notions going forward as to how we are going to do
21 this. The purpose of this meeting is to gather that
22 information.

23 FACILITATOR OLMSTEAD: Any other -- is
24 there a response typed in from the webinar on that?

25 MS. LAPPERT: No. They should be online.

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1 FACILITATOR OLMSTEAD: Okay.

2 MS. MILLIGAN: Because certainly if they
3 don't have time to do it now they could send their
4 thoughts to Alysia, and she would be able to
5 disseminate it to the group of us.

6 MS. BONE: Thank you, Trish. Yep, I was
7 just going to say the same thing. On Slide 14, I
8 have -- or 15 is my contact information, so anything
9 that you aren't able to talk about today, please feel
10 free to email me.

11 OPERATOR: We do have another question.
12 It comes from Mary.

13 MS. LAMBERT: Trish, I recommend also
14 that you look at Dr. Daniel Hirsch's Committee to
15 Bridge the Gap comments on the EPA draft PAG that was
16 submitted obviously a month or so ago, because it
17 provides many, many tables comparing the consequence
18 of the recommendations to EPA drinking water
19 standards and across the board. So I think you'd
20 find it very instructive.

21 Thank you.

22 MS. MILLIGAN: Thank you, Mary. And just
23 -- while we're not here to discuss or defend EPA
24 documents, just in case you hadn't heard, they have
25 extended the comment period until September 15th.

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1 MS. LAMBERT: Yes, I'm aware of that.
2 Thank you.

3 MS. MILLIGAN: Okay.

4 FACILITATOR OLMSTEAD: Are there any more
5 comments or questions from the phone?

6 OPERATOR: No further questions.

7 FACILITATOR OLMSTEAD: Anybody in the
8 room?

9 (No response.)

10 Okay. Maybe we can close out this topic
11 and move on to the next bullet.

12 MS. MILLIGAN: Thank you.

13 MR. SCHOFER: Hello. My name is Fred
14 Schofer, NRR. And I plan on talking about discount
15 rates and the impact that they could have on present
16 value benefits and costs.

17 First, I'll talk a little bit in terms of
18 what is a discount rate. I'll talk about its impact
19 or sensitivity on the results, talk about current NRC
20 guidance, and then ask for input from the attendees.

21 The discounting renders costs and
22 benefits that occur in different time periods
23 comparable by expressing their values in present
24 terms. In practice, it is accomplished by
25 multiplying the change in future consumption that

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1 will -- with regard to market, non-market goods or
2 services, that will be caused by a proposed policy by
3 discount factor. And, properly applied, it tells how
4 much future benefits and costs are worth in today's
5 dollars.

6 The impact that discounting benefits and
7 costs depend on the nature and timing of those
8 benefits and costs -- for example, discounting can
9 substantially affect the net present value of costs
10 and benefits when there is a significant difference
11 in the timing of when the costs and benefits are
12 incurred, such as if a proposed policy requires large
13 initial costs, or if that same policy then has long
14 delays before benefits are realized.

15 The current NRC guidance is -- that we
16 follow is in accordance with the Office of Management
17 and Budget, OMB Circular Number A4, which is
18 regulatory analysis. And in there present worth
19 calculations are used to determine how much society
20 would need to invest today to ensure that the
21 designated dollar amount is available in a given year
22 in the future. And by using these present worth
23 calculations, costs and benefits, regardless of when
24 they are incurred in time, are valued to a reference
25 year.

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1 Now, the choice of a discount rate and
2 its associated conceptual basis is a topic of ongoing
3 discussion within the government. However, based on
4 OMB Circular A4 guidance, the NRC uses two values.
5 One is three percent, and the other is seven percent
6 real discount rates.

7 The three percent discount rate
8 approximates the real rate of return on long-term
9 government debt and serves as a proxy for the real
10 rate of return on savings, to reflect reliance on a
11 social rate of time preference discounting concept.
12 And typically that is equivalent to your risk-free
13 rate, which is comparable to a 10-year treasury note.

14 A seven percent rate approximates the
15 marginal pre-tax real rate of return on an average
16 investment in the private sector, and is the
17 appropriate discount rate whenever the main objective
18 of the regulation is to displace or alter the use of
19 capital in the private sector.

20 So because proposed regulations impact
21 licensees we are requiring them to spend and go to --
22 you know, get current market rates to implement the
23 proposed regulatory action. And, therefore, we are
24 looking at the cost of money versus the real rate of
25 return. And OMB recommends a seven percent rate is

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1 consistent with this opportunity cost of capital
2 concept.

3 So what we are looking for is, you know,
4 currently we are in, you know, a low interest rate
5 environment. We may be in this environment for, you
6 know, several years. And we are looking for whether
7 there are opinions with regard to whether OMB
8 Circular A4, using the seven percent to evaluate
9 regulatory actions, is appropriate, with the three
10 percent as a sensitivity, whether we should be
11 looking at additional sensitivity rates that are
12 different from three and seven, or whether there are
13 other ideas with regard to treatment of evaluating
14 both net costs and net benefits and regulatory
15 analyses.

16 So I open it to the floor.

17 FACILITATOR OLMSTEAD: Does anybody in
18 the room have any comments or questions? Please come
19 up. Thanks.

20 MR. DOLLEY: Thanks. I'm Steven Dolley
21 with Platts Nuclear Publications. And I just
22 wondered within this category if you are looking at
23 any of the issues related to the monetarization of
24 value of life or non-fatal cancer, or whether this is
25 strictly limited to the economic and opportunity

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1 costs of the money that the licensee would be
2 expending.

3 MR. SCHOFFER: Thank you, Steve, for that
4 question. Actually, that addresses a couple of
5 different things with regard to approaches we are
6 considering with this plan. Previously -- a previous
7 slide talked about plans for updating the -- where is
8 it? The dollar per person-rem conversion factor
9 policy.

10 Currently, that value is \$2,000 per
11 person-rem of burden. And with regard to value of
12 statistical life, which you brought up and the cancer
13 risk associated with that, both of those values had
14 been updated. EPA has updated their value recently
15 with regard to value of statistical life, and we've
16 looked at that as part of our update as well.

17 So that is actually a separate issue and
18 is being addressed in a NUREG that will be going out
19 for public comment later this year or early next. So
20 I think that addresses the one side.

21 With regard to the second question, I
22 think it's a little bit broader than the way you
23 characterized it, because when we do regulatory
24 analyses we discount both future benefits and future
25 costs. So when we monetize and avert a dose, we use

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1 a discount rate to bring that back to present value.

2 So when we talk about discount factors, it does
3 impact averted dose.

4 MR. DOLLEY: Just a quick followup on
5 that, and maybe this is just a misunderstanding. But
6 you would be discounting the actual dose, or you take
7 the dose analysis through to the impact on human life
8 and discount that?

9 MR. SCHOFER: What we do is we report
10 averted dose, but the monetized value of that dose,
11 using the conversion factor of 2,000 and 4,000, is
12 how we then discount that back in dollars. So we
13 discount dollars; we don't discount dose.

14 MR. DOLLEY: Okay. That's an interesting
15 effect. Thank you.

16 FACILITATOR OLMSTEAD: Does anybody else
17 in the room have any comments or questions?

18 (No response.)

19 Okay. How about on the webinar?
20 Operator, can you check for the phone participants?

21 OPERATOR: Once again, if you have a
22 question, please press star one. One moment. Mary,
23 your line is open.

24 MS. LAMBERT: Hello there. Discount rate
25 being a mathematical adjustment that reduces cost, it

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1 goes backwards? Based on the idea -- unless I have
2 it totally wrong, it has been a long time since I
3 took economics, but it's based on the idea that
4 things will cost less in the future than now?
5 However, that appears backwards, because things cost
6 more in the future than they do now.

7 So I would think by using a discount rate
8 you are reducing the number, and thereby one other
9 way of minimizing true economic consequences.
10 Correct me, please, if I'm wrong. As I say, it has
11 been a long time since I have taken economics.

12 MR. SCHOFFER: Okay. This is Fred Schofer
13 again. When we do regulatory analysis, we use
14 constant dollars. That is, numbers that have already
15 been adjusted for inflation. So when we are
16 discounting back, inflation is already removed from
17 the equation. So if you were doing nominal dollars,
18 then you would have to inflation for inflation, and
19 then you would then deflate again with inflation to
20 bring it back to constant dollars.

21 However, if you do the entire analysis in
22 constant dollars, then you have already made that
23 adjustment.

24 MS. LAMBERT: Okay.

25 MR. SCHOFFER: Does that help you, Mary?

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1 MS. LAMBERT: Yeah. I see what you're
2 saying. I have to think about it. So thank you.

3 FACILITATOR OLMSTEAD: Are there any
4 other comments or questions from the teleconference
5 participants?

6 OPERATOR: No further questions.

7 FACILITATOR OLMSTEAD: Anyone else in the
8 room?

9 (No response.)

10 All right. How about if we close out
11 this topic and we will move on to the next one, which
12 is looking at the radius for doing our analysis.

13 MR. PALMROSE: Hi. I'm Don Palmrose.
14 The current NRC guidance is to evaluate the effects
15 of postulated accidents within 50 miles of the site.
16 This includes the cost-benefit valuation for
17 regulatory analysis, including backfitting analysis,
18 and severe accident analysis, including severe
19 accident mitigation alternatives and environmental
20 impact statements.

21 And examples of the documents that can be
22 referenced for this are the regulatory analysis
23 documents, the NUREG-BR-0058, NUREG-BR-0184, and then
24 the NUREG-1555, the standard review plans for
25 environmental reviews for nuclear powerplants.

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1 The staff asked for your thoughts whether
2 or not to extend these analyses beyond 50 miles and
3 why. Your slide on 13 has three sub-bullets as
4 possible factors for consideration, and they are
5 under what conditions should the analysis extend
6 beyond 50 miles, what factors to determine how far to
7 extend the analysis, and dose factor should be based
8 on the linear no threshold or a truncated value.

9 I'll open it up for questions.

10 FACILITATOR OLMSTEAD: Does anyone in the
11 room have any comments or questions? Anybody on the
12 webinar? Oh, okay. Steve, go ahead.

13 MR. DOLLEY: Hi. Steven Dolley with
14 Platts again. Given NRC regulations use LNT, what
15 would be the regulatory basis for using a truncated
16 value? I have the same question with SOARCA.

17 MR. PALMROSE: Well, again, the linear no
18 threshold assumes that if you go down to the risk of,
19 you know, zero -- decreasing risk with a decreasing
20 dose, and so whether or not there is a scientific
21 basis for looking at a different level where there is
22 maybe a threshold value to be considered, where the
23 health effect would basically be fairly measurable
24 could be one consideration.

25 MR. DOLLEY: But I guess I didn't make

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1 clear what I was trying to say. NRC's regulatory
2 activities and regulatory structure is based on an
3 assumption of LNT. Isn't that correct? I was
4 wondering what the basis would be, given that, for
5 departing from that approach and using a truncated
6 value. Wouldn't that be contrary to the basis for
7 agency regulation?

8 MR. PALMROSE: Again, regulatory
9 regulation is to ensure the protection of the public.

10 And so in that regard we want to make sure that
11 whatever we -- the regulation is adequate for making
12 sure that there is no harmful effect. In the case --
13 again, that has come up from time to time as being
14 overly conservative. And so potentially looking at a
15 truncated dose might better quantify what the
16 expected impacts could be.

17 MR. DOLLEY: But then, wouldn't you have
18 an analysis based on an approach that is different
19 than the LNT approach that the agency uses for its
20 regulatory activities?

21 MR. PALMROSE: Well, I guess we'll have
22 to take a look at that and make sure that what we
23 recommend will be adequately explained to answer your
24 question. Tina?

25 FACILITATOR OLMSTEAD: Yeah. Come on up

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1 because of the -- our speakerphone setup. Thank you.

2 MS. GHOSH: This is Tina Ghosh, the
3 Office of Research. I think we are proposing topics
4 that we may want the Commission to weigh in on from a
5 policy perspective, and I think you are identifying
6 that that would probably be a departure from current
7 Commission policy. We do our regulatory activities
8 based on LNT right now. So if we added that as a
9 topic in the paper, the Commission would decide, you
10 know, whether we are going to depart from that.

11 And just a quick note, you also mentioned
12 SOARCA. SOARCA was a research project and the
13 results were presented in terms of both LNT and some
14 alternative dose threshold models. For all of the
15 kind of post-SOARCA, any regulatory activities we are
16 doing post-SOARCA where we might rely on some of the
17 SOARCA models and methodologies, we are using the LNT
18 for the regulatory activities. We are not using the
19 dose thresholds as a basis for regulatory activities
20 right now.

21 MR. DOLLEY: Thank you.

22 FACILITATOR OLMSTEAD: Tina, can you
23 state your first and last name?

24 MS. GHOSH: Tina Ghosh, Office of
25 Research.

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1 FACILITATOR OLMSTEAD: Okay. Thanks.

2 MR. DOLLEY: Thank you.

3 FACILITATOR OLMSTEAD: Does anybody else
4 in the room have any comments or questions?

5 (No response.)

6 Okay. Anything on the webinar?

7 (No response.)

8 Okay. Operator, can you check on the
9 phone line, please?

10 OPERATOR: Once again, to ask a question
11 please press star one. Mary, your line is open.

12 (No response.)

13 It looks like we may have lost her.
14 Hopefully she comes back on. Otherwise, we have no
15 further questions.

16 FACILITATOR OLMSTEAD: Okay. I guess
17 we'll move on to our last bullet, which is asking
18 other people for potential policy issues to be
19 considered for the SECY paper that will be going up
20 for the Commission.

21 Does anyone in the room have any
22 thoughts? The webinar? No?

23 (No response.)

24 Operator, can you check on the phone
25 line, please?

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1 OPERATOR: Once again, to ask a question
2 please press star one. One moment. Once again, to
3 ask a question please press star one. Mary, your
4 line is open.

5 MS. LAMBERT: Yes. Sorry. When I hit
6 the mute button, I actually hung up. In regard to
7 the LNT comments, not only would it be a departure
8 from current standards, but it also would depart from
9 BEIR 7, which clearly must be acknowledged to be the
10 latest accepted research on health effects.

11 If in fact you don't stick to that, then
12 it has impacts on obvious economic consequences
13 because what heretofore had been considered as
14 harmful all of a sudden will be declared not harmful.

15 And as far as distances go, there has to be
16 consideration for accidents that result in fire.

17 For example, the National Academies, on
18 spent fuel pool fires, indicate that a contamination
19 beyond 100 miles downwind, we find Chernobyl had
20 fired, the results in both instances that the plume
21 goes higher up into the atmosphere and thereby is
22 carried at greater distances. And so that alone
23 would argue for extending beyond 50 miles.

24 Thank you.

25 FACILITATOR OLMSTEAD: Mary, since you

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1 were offline for a bit, we also are soliciting ideas
2 for any other potential policy issues that you think
3 should be considered in the SECY paper that is being
4 developed. Do you have any thoughts on that matter?

5 MS. LAMBERT: Yes, I do. Certainly,
6 consideration of changing the probability of a core
7 damage event. Since Fukushima, that has increased
8 about 10 times what heretofore had been accepted.
9 Also, I have mentioned aqueous releases. That
10 certainly is an item in the news of late of
11 continuing releases of significance from Fukushima.
12 And it seemed in -- was it 2011 that the Commission
13 voted to -- consideration of the aqueous in economic
14 consequence cost-benefit analyses? And that should
15 be finalized, implemented.

16 Also, particularly with use of the MACC
17 code, the duration of accidents should be
18 reconsidered as extending more than four days
19 certainly. That was a lesson learned from Fukushima.

20 Also, the meteorological plume that is
21 used -- I notice in one of the papers that the
22 Commission issued -- I think it was in SECY-12-0110,
23 they referenced a comparison done by Mollencamp. And
24 I'm disappointed to see that because it was very
25 clear, and it was made clear by NRC in further

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1 reports that the comparisons of the two models in the
2 plains of Oklahoma and Kansas were certainly not
3 comparable to experience of what would happen to a
4 plume in other sites that had -- by coast, by river
5 valley, by bodies of water, different variations in
6 topography.

7 And so I think that it is very key
8 because using a straight line Gaussian plume you know
9 the area likely to be impacted, and, therefore,
10 reduce the economic consequences, which is very
11 obvious.

12 Also, I think great consideration has to
13 be given to the elephant in the room, which is
14 cleanup and decontamination, and not to go back to
15 the old WASH-1400 days where the assumption that
16 hosing buildings is cleanup because it's not. It is
17 simply moving the material from one place to another,
18 and that can then become suspended or get into the
19 water.

20 Additionally, there were comments in the
21 paper on the MACCS2 in the economic analysis model
22 going to the REACT model as I remember, the real
23 economic model as opposed to the previous, that
24 considered evacuation relocation costs, it considered
25 decontamination costs, costs from land use of

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1 property, disposal of contaminated crops, et cetera,
2 et cetera.

3 This is not going to be -- at least it is
4 being considered not to be considered, and instead to
5 go to the GDP. I really would encourage
6 consideration, which it's not an either/or. These
7 other costs cost the real people and need to be part
8 of the economic consequence model for many reasons.
9 GDP, for example, totally negates environmental
10 costs, not to mention other ones also.

11 So that's a rejection or an encouragement
12 in your papers to fully explain the rationale for
13 that, because it doesn't make any sense to me.

14 Thank you.

15 FACILITATOR OLMSTEAD: Does anyone have
16 any clarifying questions?

17 OPERATOR: I am showing no further
18 questions on the phone line.

19 FACILITATOR OLMSTEAD: Okay. We have
20 something -- oh, yeah. Okay.

21 MS. GHOSH: Hi, Mary. This is Tina
22 Ghosh, and just a quick question. Do you have any
23 references that you could point us to with regard to
24 comparison of Gaussian straight line plume segment
25 models with other codes that show definitively that

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1 there is some kind of misestimation of the types of
2 consequences that the NRC looks at?

3 FACILITATOR OLMSTEAD: Would they have to
4 push star one to be able to respond to that?

5 OPERATOR: Yes, they would need to hit
6 star one to ask a question. Again, star one to ask a
7 question.

8 FACILITATOR OLMSTEAD: Or to respond.

9 MR. KOKAJKO: Mary, could you hit star
10 one, please?

11 OPERATOR: Yes. She has just cued up and
12 the line is open.

13 MS. LAMBERT: Yes. I have a simple
14 question. Did Tina Ghosh wish that I send the
15 material on the straight line Gaussian plume versus
16 other models to her, or who am I supposed to send it
17 to?

18 MS. GHOSH: Maybe it would be best to
19 funnel it through Alysia Bone. Her contact
20 information is on --

21 MS. LAMBERT: I have that. Okay. I just
22 wanted to know who to send it to.

23 MS. GHOSH: Okay. Thank you. Appreciate
24 that.

25 MS. LAMBERT: And I'll provide that to

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1 you, Tina.

2 MS. GHOSH: Okay. Thank you.

3 OPERATOR: I'm showing no further
4 questions on the phone lines at this time.

5 FACILITATOR OLMSTEAD: Okay. I think we
6 have a question from the webinar.

7 MS. LAPPERT: Yes. How will this factor
8 into SAMA analyses?

9 FACILITATOR OLMSTEAD: Do you need
10 clarification?

11 MR. PALMROSE: Yes. What part? What
12 factor?

13 MS. LAPPERT: That's all I have.

14 FACILITATOR OLMSTEAD: Whoever sent the
15 comment in the webinar, if you can push star one, so
16 you can provide further clarification, that would
17 help us. If they are only participating through the
18 webinar, they would have to type that --

19 MS. LAPPERT: Right.

20 FACILITATOR OLMSTEAD: -- in a response.
21 So did you type something to them?

22 MS. LAPPERT: Yes.

23 FACILITATOR OLMSTEAD: Okay. We'll give
24 them a couple minutes.

25 MS. BONE: We can go on to another one in

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1 the meantime.

2 FACILITATOR OLMSTEAD: In the meantime,
3 is there anyone else in the room who wants to make
4 any comments, ask any questions?

5 MS. LAPPERT: Ready?

6 FACILITATOR OLMSTEAD: Sure.

7 MS. LAPPERT: She says, "This," meaning
8 the project, "do you see making any recommendations
9 to conducting SAMA analyses in license renewal
10 application reviews?"

11 MR. PALMROSE: Well, in license renewal,
12 the severe accident mitigation alternatives have to
13 be included if the plant has not previously done one
14 as per our regulations. So they do -- they are
15 included in the license renewal applications when
16 necessary.

17 MR. DOLLEY: I think they're asking you
18 if you are suggesting that they be revised based on
19 the results of this activity.

20 MR. PALMROSE: Well, if this activity --
21 you know, whatever -- the SAMAs include averted costs
22 in their analysis, and so, therefore, whatever it
23 changes within the discounting factors would also be
24 included into that as for example.

25 FACILITATOR OLMSTEAD: So is this --

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1 MS. LAPPERT: She said thank you.

2 FACILITATOR OLMSTEAD: Okay. Good. I
3 guess I'm asking a clarification question. So is
4 this a policy question that would maybe considered in
5 the SECY paper?

6 MR. PALMROSE: I don't think so. I think
7 it would be more -- it's just -- my interpretation of
8 it is that what changes are happening that go into
9 affecting the cost-benefit analysis will have to be
10 passed into the SAMAs, because the SAMAs rely on
11 those same procedures for determining the cost-
12 benefit result.

13 FACILITATOR OLMSTEAD: All right. Thank
14 you. Are there any other comments or questions? I
15 will give the operator another opportunity.

16 OPERATOR: Thank you. Once again, please
17 press star one if you do have a question. We do have
18 another question from Mary. Your line is open.

19 MS. LAMBERT: Yeah. It sounds like I'm
20 playing 20 questions, which really I'm not doing.
21 When is the process hopefully to be completed?
22 Because, as you know, there are many of us, including
23 Dr. Lyman from UCS, that were disappointed that the
24 cost-benefit analyses were put towards the end of the
25 recommendations, so that the other recommendations,

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1 such as for self-exams and this and that, were being
2 analyzed on a dated cost-benefit analysis or cost-
3 benefit analyses assumptions that did not include
4 lessons learned from Fukushima. So it's a backwards
5 approach.

6 So the question is, how much -- when do
7 you plan to finish all of this?

8 MS. BONE: Thank you for the question,
9 Mary. This is Alysia Bone again. As far as the
10 paper itself is concerned, that is due the end of
11 this year, in December of this year. But, again,
12 that is going to just be our plan or a high-level
13 plan for the steps to come.

14 As far as completing the overall update
15 process, I think --

16 MS. LAMBERT: Yeah, that's what I'm
17 talking about.

18 MS. BONE: Sure. I think it is a little
19 too early to tell right now. We are not exactly sure
20 what that timeline is going to look like. That is
21 going to be something that we are hoping to -- we are
22 going to provide at least some level of information
23 in this paper itself.

24 So I don't have any more information on
25 when the -- as a whole this process will be

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1 completed. I do think that it's going to take -- you
2 know, it's going to be a multi-year effort, hopefully
3 having deliverables in each year. But as far as the
4 overall, you know, by X date this is -- everything is
5 going to be completed, I don't have that at this
6 point.

7 MS. LAMBERT: And is it only going to be
8 guidance, so there is no teeth behind any
9 recommendations that the staff ends up with?

10 MR. SCHOFER: This is Fred Schofer.

11 MS. LAMBERT: It says guidance.

12 MR. SCHOFER: Yes. This is Fred Schofer,
13 NRR. Yes, we are talking about regulatory analysis,
14 and we are talking about the guidance documents
15 associated with the performance of that, as well as
16 other offices use that same analysis guidance to
17 perform SAMDA, SAMAs, and other evaluations as
18 described previously in the SECY-12-0110.

19 With regard to this guidance, once a
20 regulatory analysis is performed, it is really a
21 decision-making tool provided to management to help
22 guide them with regard to going forward or not with a
23 proposed regulatory action. So there -- you know, it
24 is just another piece. The regulatory proposed
25 action typically, you know, goes through a rulemaking

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1 order process, and the RA is provided to support that
2 process.

3 So you are correct in that what we are
4 talking about is not directly a mandate on licensees,
5 but it is fully considered in the regulatory action.

6 MS. LAMBERT: Yeah. One question. You
7 may or may not be able to answer it. Rulemakings --
8 what is the range of time when the rulemaking
9 petitions are completed? That's one question.

10 The second question is, what percent of
11 rulemaking petitions provide substantive relief? And
12 I'm asking that because I know Atomic Safety
13 Licensing Board, Judge Rosenthal, in a proceeding I
14 was involved in, asked the same questions of the
15 staff for satisfaction from 2.206 enforcement
16 petitions, and he found that only one in 37 years
17 provided substantive relief.

18 And so then the other avenue for the
19 public, other than, you know, just voicing concern is
20 rulemaking. So do you know what the range of time
21 when one can expect a rulemaking petition is
22 determined, and what percent have had, say, in the
23 past 37 years in comparison, substantive relief?

24 MR. SCHOFFER: This is Fred Schofer, NRR.
25 I don't have those statistics memorized. However,

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1 we can provide that as part of the meeting summary.

2 MS. LAMBERT: That would be wonderful.

3 MR. SCHOFER: Those statistics are
4 maintained. I just don't have them readily
5 available.

6 MS. LAMBERT: That would be appreciated.

7 OPERATOR: We do have another question
8 from David Weisman. Your line is open.

9 MR. WEISMAN: Good afternoon. David
10 Weisman, Alliance for Nuclear Responsibility. But by
11 the time you got to my question, it was essentially
12 the one that Ms. Lambert had asked, which was what
13 your timeframe is and you have already gone through
14 that. So question was asked and somewhat answered.

15 OPERATOR: I am showing no further
16 questions at this time.

17 FACILITATOR OLMSTEAD: Any other
18 questions on the webinar? Anyone in the room?

19 (No response.)

20 All right. Well, thank you. Before
21 Lawrence gives his final remarks and adjourns the
22 meeting, I want to remind everyone who hasn't signed
23 in to please sign in. And there is sign-in sheets --
24 should be in this room and where you first came in.

25 Also, for those on the phone, please

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1 contact Glenna Lappert or Alysia Bone, and their
2 contact information is in the meeting announcement,
3 to make sure we have your contact information.

4 And please don't forget to fill out the
5 feedback forms on the meeting, and your input is very
6 helpful for us to improve our future meetings.

7 Lawrence, would you like to make any
8 other comments --

9 MR. KOKAJKO: Yes.

10 FACILITATOR OLMSTEAD: -- and adjourn the
11 meeting?

12 MR. KOKAJKO: Thank you very much.
13 Before I begin to close, let me ask the panel if they
14 would like to add any final closing remarks. No?

15 MS. BONE: Well, I will just reiterate
16 that if there is anything else -- topics that you
17 weren't able to cover today in the meeting, please
18 also feel free to send me an email for, you know, any
19 other considerations as we go through this process.
20 That's Alysia Bone.

21 MR. KOKAJKO: Thank you. Thank you for
22 attending today, both on the webinar, on the phone,
23 and in the meeting room. I very much appreciate the
24 comments and the discussion that we have had today.

25 As you see, we are still in some very

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1 incipient stages of trying to work through this.
2 Your comments today and questions are helpful as we
3 begin to look at preparing our paper for issuance by
4 the end of the year.

5 Again, please feel free to contact Alysia
6 Bone, and her contact information is in the slides,
7 if you have any additional comments or questions, or
8 if you need to access information that is publicly
9 available.

10 I have no further comments. But, again,
11 thank you, and I look forward to a paper later this
12 year.

13 Thank you.

14 OPERATOR: Thank you. This does conclude
15 the conference. You may disconnect at this time.

16 (Whereupon, at 3:22 p.m., the proceedings in the
17 foregoing matter were concluded.)
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