

UNITED STATES OF AMERICA
U.S. NUCLEAR REGULATORY COMMISSION

BRIEFING ON PROPOSED RULE TO REVISE THE
ENVIRONMENTAL REVIEW FOR RENEWAL OF
NUCLEAR POWER PLANT OPERATING LICENSES
(PART 51)

JANUARY 11, 2012

1:00 P.M.

TRANSCRIPT OF PROCEEDINGS

Public Meeting

Before the U.S. Nuclear Regulatory Commission:

Gregory B. Jaczko, Chairman

Kristine L. Svinicki, Commissioner

George Apostolakis, Commissioner

William D. Magwood, IV, Commissioner

William C. Ostendorff, Commissioner

APPEARANCES

Industry Representatives:

Ralph Andersen
Senior Director
Radiation Safety and Environmental Protection
Nuclear Energy Institute

Jack Bailey
Vice President
Nuclear Generation Development
Tennessee Valley Authority

Public Interest Representatives:

Phillip Musegaas
Riverkeeper

Robert Snook
Connecticut Assistant Attorney General

NRC Staff:

Bill Borchardt
Executive Director for Operations

Eric Leeds
Director
Office of Nuclear Reactor Regulation

Melanie Galloway
Acting Director
Division of License Renewal
NRR

Andrew Imboden
Branch Chief
Environmental Review and Guidance Update Branch
NRR

1 PROCEEDINGS

2 CHAIRMAN JACZKO: The Commission is meeting today for a
3 briefing on the proposed changes to our 10 CFR Part 51 and the supporting
4 technical basis document, our Generic Environmental Impact Statement for
5 License Renewal of Nuclear Plants or the GEIS. The Atomic Energy Act gave
6 the NRC the authority to issue licenses to commercial nuclear power plants for
7 up to 40 years and then to issue license renewals for up to 20 years, and our
8 responsibilities under the National Environmental Policy Act call for a review of
9 these environmental impacts at license renewal, so as part of that process we
10 have developed a generic environmental impact statement to assess the
11 impacts, in addition then, to the supplemental assessments that are done by
12 licensees; and so today we're here to talk about that generic environmental
13 impact statement.

14 This is an extremely important document, of course, because it
15 assesses the scope and impact of environmental affects that -- no problem, you
16 didn't spill anything did you? That's good, that's no problem -- and so it's very
17 important that we have a tremendous amount of public and stakeholder input in
18 this and the staff has done a nice job with the number of meetings, and this
19 meeting is in preparation for ultimately this final rule coming to the Commission
20 hopefully sometime in May, and so I appreciate our panels here today.

21 It's a significant milestone, I think, supposed to be updated every 10
22 years, I think, we're about six years behind schedule but better late than never, I
23 think, so we're on target to get an update and hopefully get that done by the end
24 of this year, so offer my colleagues -- any comments they'd like to make? Okay.

25 We'll start then, I think with Ralph Anderson, who's the senior

1 director for radiation safety and environmental protection at Nuclear Energy
2 Institute.

3 RALPH ANDERSON: Thank you, Mr. Chairman. Certainly
4 appreciate the opportunity to meet with you today, and provide our perspective
5 on the proposed changes to the environmental impact assessments for license
6 renewal. We actually submitted about 168 pages of detailed comments on the
7 proposed rule, the Generic Environmental Impact Statement, and the Draft
8 Regulatory Guide, so today I'm simply going to hit on a couple of key points out
9 of those comments. Let's see. Next slide. Thank you.

10 We do believe that the current process has proven itself to be
11 effective and continues to be so. The Chairman noted the very extensive review
12 period that has gone on in which we've been able to evaluate the experience
13 gained from previous license renewals, and our conclusion is that what the staff
14 has identified are a number of potential enhancements to the process, rather
15 than having identified deficiencies that need to be corrected, and so our view all
16 along through our comments and our interactions has been to focus on how we
17 can even further enhance the process in terms of transparency and efficiency
18 and practicality from our point of view. Next slide please.

19 Upon review of the proposed changes we noted that there were
20 new issues being added while other issues were being combined. Our concern
21 is that some of the issues that, particularly those being added, don't seem to
22 include a clearly articulated basis and justification for adding those items to the
23 rule. Apart from the idea of whether we think they should be added, it just very
24 much diminishes our ability to provide high quality comments to the agency if we
25 don't have a full appreciation and understanding of how the staff reached the

1 conclusion to add those issues and we enumerated a number of examples in our
2 detailed comments. Our concern was significant enough that we actually
3 decided to submit a separate comment letter on the rule that dealt specifically
4 with this issue of the statement of technical basis and justification for the issues.
5 We don't propose that this would require that there be some process of re-
6 noticing or that type of thing. Our real point is that that we believe that the final
7 rule should include a much more fuller and robust explanation of the intent of
8 adding these items, the basis for adding these items, and thereby that enables
9 the licensees to much more effectively implement and respond to these new
10 issues. Next slide please.

11 In regard to the proposed rule, we have recommended the
12 reclassification of four issues from Category 1 -- excuse me, Category 2 to
13 Category 1. That is, that we believe they could be addressed generically and we
14 have also made comments suggesting the removal of two of the issues. In its
15 move towards enhancing the efficiency of the process, the staff combined a
16 number of issues, and that had what appeared to us to be an unintended
17 consequences where Category 1 and Category 2 issues, as classified previously,
18 were combined to make the overall combined issues Category 1. In our public
19 meetings with the staff we got an indication that that was not the intent, but a
20 legal reading of the rule would cause that outcome, so we made a number of
21 recommendations about how to address that.

22 Additionally, we see in the rule, and especially from the experience
23 gained from the many years of license renewal that we've undertaken, an
24 opportunity for the agency to further leverage the expertise and primacy of other
25 agencies on certain issues that are regulated under other statutes by other

1 agencies. This is not to say that the NRC does not maintain the responsibility to
2 review these issues, but we think that there's a much greater opportunity to
3 capitalize on the fact that these are regulated issues which have been through
4 their own processes to assure adequate protection of the environment, and we've
5 made a number of suggestions in our comments in that regard. Next slide
6 please.

7 We noted in our comments a number of instances in which the
8 regulatory guidance and the proposed rule are inconsistent, probably the
9 opportunity to go back after the fact and take care of that is already been
10 undertaken, but nevertheless we did try to point out to the extent that we could
11 where those inconsistencies were found and expect that the final rule will resolve
12 all those issues.

13 In regard to issues that are classified as Category 1, by definition
14 those have been generically assessed by the agency and the conclusion on the
15 degree of impact has already been supported generically across all of the sites;
16 however, if you look in the guidance, even where it is classified as Category 1
17 and that conclusion is reached, nevertheless the guidance calls for a
18 considerable amount of information, which to us seems to be either unnecessary
19 or redundant, and our thought is for Category 1 issues, ultimately, what we
20 should be providing is that information that falls into the category of new and
21 significant information that 's both relevant to NEPA, relevant to license renewal
22 and may potentially have the effect of changing the conclusion; and we make
23 suggestions in that regard as well in our detailed comments.

24 We also suggest that the guidance could take a more graded
25 approach to the level of detail that is required commensurate with the potential

1 for what the impact of that particular issue or area might be, and we made a
2 number of suggestions in that regard. Final slide please.

3 In regard to the timing of implementation, we have suggested,
4 based on a polling of folks that have prepared the reports in the past, as well as
5 those that are currently in process, that 18 months would be a very appropriate
6 transition period from the time of issuance of the rule until the rule would apply
7 universally to all licensees. I believe that my colleague from Tennessee Valley
8 Authority will offer some additional insight, however, into what current licensees
9 who have works in process are doing in regard to the proposed rule.

10 And then finally, it's our intent, and we've discussed with the staff,
11 having an industry workshop following issuance of the final rule and guidance to
12 work our way through and hopefully bring some alignment in our understanding,
13 especially to any new provisions or new issues, to help facilitate both submittals
14 finding them sufficient, as well as the review process itself. Thank you very much
15 and I'll look forward to your questions.

16 CHAIRMAN JACZKO: Well thank you. We'll now hear from Jack
17 Bailey, who's the vice president of nuclear generation development at Tennessee
18 Valley Authority.

19 JACK BAILEY: Thank you very much. TVA certainly appreciates
20 NRC's efforts to further develop a generic environmental review requirements
21 and guidance. We have participated with NEI and we have -- also we submitted
22 separate comments, not nearly as extensive as NEI's alone, back about two
23 years ago into the process.

24 On the Slide Number 2 for me we can show it, this is really just
25 background so you get a feel for the nature of my comments and while I'm trying

1 to illustrate that TVA is in the process of developing its license renewal
2 application right now for our Sequoyah nuclear plant we do have one unique
3 aspect of TVA in this process that would not apply generally to the industry and
4 that's that we do our own NEPA process in parallel or in addition to the one we
5 do with the NRC. That -- in this case we have already done that and we issued
6 our record decision on that last summer. We do expect though, in this process,
7 to be the first applicant to submit an application after the rule is issued and that --
8 so for that reason we've been having to think very thoughtfully about how would
9 we implement the requirements of one or the other or both in the process and
10 some of the details about how long you allow the implementation to take place,
11 or what format it needs to take for the staff have been critical things in our
12 discussions with the staff up until now and there is still some uncertainty in that
13 process, but overall we think we can come up with a workable solution. Go to
14 the next slide real quick.

15 I'm really going to illustrate or highlight just two issues overall and
16 give it more from an operational side of managing a project like this versus the
17 details of the individual environmental issues that have been raised. I think in
18 general we agree with all the NEI comments, we actually though made a couple
19 recommendations to the staff in our comments that they might want to add some
20 additional criteria before they screen something out of Category 2 to put it in
21 Category 1 in a couple of areas; so it wasn't all about taking things out;
22 sometimes it was about making sure the right things were addressed in the
23 process, but I do hope to show you one, how are we trying to deal with the
24 adequacy of our application given the uncertainty that goes on with when the rule
25 will be finalized and what the final content is, and second, to help you get a better

1 feel for why we're asking for the time frame that NEI suggested would be
2 necessary to implement the requirements of the new rule in general for the
3 industry. It's our understanding that in addition to TVA there are probably five
4 other utilities that are shortly behind us, or not too far behind us, that will be
5 submitting their applications that will also be in this transition period between
6 rules, and so they're looking very closely at how we move forward here also.

7 On the next slide, we use the term crosswalk. In general, what that
8 means, and we've used terms like matrix in the past or now crosswalks, but when
9 you have two different sets of criteria or requirements that are being developed,
10 you have to somehow cross reference and making sure you're addressing the
11 parts of all of them that you have to, and so we're using this crosswalk to show
12 what were the requirements of the 1996 guide, what were the requirements in the
13 draft guides. What we don't have yet in our ability to do that yet is what is the
14 disposition of some of the open items that were there from the draft guides, so
15 that could be an issue for us as we move forward. We want to make sure that
16 the new issues or the expanded issues are dealt with adequately as well as
17 dealing with the old ones.

18 On the next slide I've illustrated just one little segment out of about
19 a nine page crosswalk that we developed so far, and it's still under development
20 as we learn things and move forward, but the idea here is you can see is we as a
21 utility have to manage two sets of requirements and we -- and in some cases the
22 new requirements are actually helpful, if we knew we could follow them and we
23 wouldn't have to do certain work, but we don't know that that's the case yet, so
24 we're having to -- anything that was a Category 2 in either document we have to
25 address, and we have to take the most expansive understanding on what that

1 requirement was in either one of the two documents to make sure it's addressed
2 in what we do.

3 Again, is that a show stopper for us or other people? No, if those
4 were all the requirements there were, you can manage with that approach, other
5 than it is extra work for people to do, but there are still some uncertainties on
6 what the final rule is going to say and how it's going to address certain issues
7 and so, we have not yet determined how we're going to be able to address those
8 issues.

9 But on this slide, just real quick, you can see, and I'll just illustrate,
10 this goes down to every item. The blue item we have on here, and I think it
11 shows up in blue on yours, yes, is an example of an expansion of an existing
12 issue that was in a prior guide, and you can see by the expansion in 1996 when
13 we had applicable to Sequoyah, the answer was no, but in 2009 it's yes. The
14 expansion there was dealing with not just refurbishment activities but operational
15 activities for the plants. In the yellow, it's an example of new issue that wasn't
16 there before that has been made a new issue, and again, like I said, to the extent
17 we know all that stuff now, that helps us in the process, and we just have to deal
18 with things we don't know. Moving to the next slide.

19 Big picture for most utilities, almost everybody now is hiring
20 contractors to do the work on license renewal to a large extent both the
21 environmental review side and the technical review side and safety sides, and
22 you typically -- what makes these projects hard is you have to be able to
23 interface with multiple people at a given plant that are your experts like system
24 engineers, operations folks and others, because they have to do the extensive
25 reviews in all the areas we're trying to cover, and we can have people prepare

1 the documents, but there has to be a lot of review and approval, in fact, at the
2 end of the day the site needs to own the license renewal work and manage it as
3 an ongoing, living process from that point forward. So, you're really starting a
4 project, you know, two years ahead of submittal, probably. The ER is at least 18
5 months before submittal and you're locking down on format and content early in
6 that process as you're doing that work, so by the time you get through that first
7 12 months of your project, the last six to eight months is really all the internal
8 reviews, industry experts, peer reviews and other things, so this is why we say
9 we need an 18 month lead time because we're really finalizing that work about 14
10 to 18 months before it gets to that point where, you know, we would have to
11 change it all and go back through more reviews with the reviewers and stuff, and
12 sites and safety committees and all the other things we would have to do to
13 submit a license application.

14 So, in summary really, that gives you -- sort of gives you a feel for
15 what we're recommending here, and one is again, this process is a good
16 process, as probably an example of a successful regulatory process that can
17 work for the industry and the regulator because we can deal with a number of
18 these issues one time and hopefully not have to then address them on every
19 application after that, or we know where we do have to and we can address them
20 appropriately. So having the regulations and the guidance documents finalized
21 so that we know what they are is one of -- we really want just to get this thing
22 done, we've been dealing with it for a long time, as you said.

23 The other one is that the sufficient lead time, 18 months is -- the
24 industry sort of coalesced around -- that's probably the minimum time we need, it
25 works for us, but TVA actually could take a little shorter, only because we do

1 NEPA on our own ahead of time and we've already done a lot of NEPA work
2 when we're doing this process, but you can't use exactly our example to deal with
3 the entire industry, so thank you.

4 CHAIRMAN JACZKO: Thank you, next we'll hear from Phillip
5 Musegaas who is the Hudson River program director of Riverkeeper. Did I get
6 that right?

7 PHILLIP MUSEGAAS: Yes, you did, thanks Chairman. So thanks
8 to Chairman Jaczko and the Commission for inviting us to participate in this
9 process. We've been -- Riverkeeper also filed extensive comments to the
10 original GEIS update in I guess about two years ago now, and so what I'd like to
11 do is I have a request to make just to start off my comments and then I know, you
12 know, Riverkeeper was asked to come and talk about the public interest
13 perspective, so I'd like to give some general comments on that, and then if I have
14 time I'll hit some highlights of the comments we filed in 2010.

15 So, just to begin with, Riverkeeper would like to request that the
16 NRC actually reopen the comment period for the GEIS update and the reason
17 we're asking for this -- there are a couple of reasons, but one, I think the main
18 one, is there have been a number of significant events or changes or
19 developments that we believe directly implicate the content of the GEIS and I
20 think they will probably be fairly obvious to you all. The fact that Yucca Mountain
21 -- excuse me -- that the permanent repository is no longer -- based on our
22 understanding is no longer on the table, the fact that we have had the Fukushima
23 disaster and we're still in a process of learning from that, and also, on a lesser
24 note but still we think important to this process is we did have a 5.9 earthquake in
25 Virginia which, you know, addresses and deals with seismic issues, and seismic

1 issues are dealt with to a limited degree, I believe, in the GEIS, under the
2 geologic and soil conditions section of the GEIS.

3 And so, you know, because of the fact that comment period
4 essentially closed two years ago, and all these things have happened more or
5 less since then, we believe it would make sense to reopen the comment period
6 for a limited time, at a minimum and allow other states -- we know New York
7 state is very interested in and has been very involved in this process dealing with
8 Indian Point and New York State's very interested in supplementing the
9 comments they made, you know, and we don't ask this lightly, we're not looking
10 to delay this process. We certainly think that, you know, 16 years as you said, is
11 a very long time and if there was a way to do this more quickly and -- that's
12 something I'm going to talk about next -- a way to update the GEIS or provide an
13 ability for the public to more meaningfully participate in this process, we would
14 support that.

15 So in terms of the public interest perspective Riverkeeper, in
16 essence, does not think that the combination of this generic EIS and the site
17 specific EIS process, as it's now envisioned in the GEIS update, really satisfies
18 the requirements of NEPA. We do not believe this -- the combination of these
19 two processes provides a hard look and provides a comprehensive process for
20 analyzing all the environmental impacts resulting or potentially resulting from
21 license renewal, and I'll just focus on a couple of quick issues.

22 The first one, of course, from a public perspective is I don't believe
23 the public really has a good understanding of why several of the most critical
24 issues that the public is concerned about in terms of nuclear power and the
25 issues that come up when plants like Indian Point are up for relicensing, are kept

1 off the table in this NEPA process, and those are, of course, emergency
2 preparedness, emergency planning, spent fuel and nuclear waste storage,
3 security concerns; those are the three primary ones, I think the seismic issues
4 has come up over the last couple years, but that's a lesser issue, but emergency
5 planning, security and nuclear waste storage. The question I get from the
6 general public more often than any other question is when I explain how this
7 process works and the fact that these are not part of the NEPA process, they
8 look at me as if I'm crazy, and they don't understand how that works, and of
9 course, Riverkeeper, I think, disagrees with the Commission's rationale for why
10 that works and that's one issue. The other issue is communicating your rationale
11 to the public more effectively and letting the public decide.

12 And so in terms of these issues -- and emergency preparedness is
13 a good one and I'm probably going to run out of time before I get through all of
14 my comments, so, you know, my understanding is that when plants are first
15 licensed, there is that formal decision made, or formal finding made of
16 reasonable assurance regarding the evacuation planning and emergency
17 preparedness. That finding is made once. It is not made again during the
18 relicensing process; it's not required to be made again, no matter what happens
19 in the surrounding area. I think their reasoning is that the changes in population,
20 density, changes in other issues that would affect the efficacy of the -- of the
21 evacuation plan, emergency plan would be somehow integrated into the annual,
22 biannual drilling, the emergency exercise process.

23 We do not believe that that's an adequate substitute for stepping
24 back during that license renewal process, and really taking a look and
25 reexamining the emergency planning aspect of this issue. We do not believe that

1 would result in, you know, undue delay or an undue burden on the applicant. We
2 believe it's a common sense approach and this is not new. We've made these
3 comments repeatedly before the Commission in different contexts.

4 The second issue in terms of public participation that I wanted to
5 focus on a little bit is -- excuse me -- is the question of how new and significant
6 information is addressed and is integrated, both what that actually means, you
7 know, how new and significant information or the requirements to assess that or
8 what the standard is for determining when something rises to that level. We don't
9 believe there's a clear standard or a clear criteria there for the public or frankly for
10 the licensees and the applicants to know how they're supposed to address that
11 issue; so I think at a minimum it would benefit the Commission and benefit the
12 industry to -- and the public of course -- to spell out what that criteria actually
13 means, and we've struggled with this firsthand since Indian Point filed for license
14 renewal dealing with the groundwater leaks and the groundwater contamination
15 from the spent fuel pools, both in figuring out what the best way was for the
16 public or an advocacy group to actually raise questions or raise issues about this,
17 and raise concerns about groundwater contamination as a new and significant
18 issue.

19 We know that, of course, in this -- in that revised update that you're
20 proposing to make some aspects to that category too so we support that and we
21 appreciate that, but some of the questions that come to mind are -- you know,
22 again, I mentioned it. What is the criteria for determining for the staff and the
23 applicant to determine when something rises to the level of new and significant?
24 I know with Entergy and the Indian Point application, I believe in their initial
25 environmental report Entergy commented that groundwater -- I'm sorry, spent

1 fuel pool leaks were potentially new information but they were not significant, and
2 the staff followed suit in that assessment and that's continued to this day.

3 Another question would be, you know, under other impacts of
4 Category 2 and under NEPA you're required to look at mitigation of proposed
5 impacts or potentially foreseeable impacts, what mitigation measures are
6 available. You're also required to look at alternatives that could either minimize
7 or avoid these impacts altogether. Is that same level of analysis required when
8 you are introducing new and significant information? I don't think that's clear at
9 this point.

10 Finally, of course, I think most importantly from our perspective is
11 how is the public -- or let me rephrase that a little bit. What is the public's role
12 supposed to be in terms of introducing or commenting on what the public
13 perceives as new and significant information that the public thinks should be
14 assessed in the NEPA process, and I think that is -- under the current system is
15 severely restricted and does not give the public the real opportunities that they
16 are required to have under NEPA to really meaningfully participate in this
17 process and for this process to comply with NEPA.

18 And I've got about a minute left; I'm just going to very quickly
19 highlight some of the key comments from our initial comments two years ago.
20 One, we agree with the NRC's decision to make groundwater contamination a
21 Category 2 issue, but we also believe that should be broadened and essentially
22 we know that the NRC is proposing to make -- to create a new a Category 1
23 impact assessment for exposure of aquatic organisms to radionuclides. My
24 understanding is that that under the current -- I'm sorry, under the proposed
25 GEIS update that requirement only applies to routine radiological releases; we

1 believe that should be expanded to also include inadvertent releases. The
2 cumulative impacts of inadvertent and routine releases should be part of that
3 assessment and if they are, that's great, it was a little hard to understand from
4 the proposal, and let's see, I think I'm out of time so I will leave it there. I look
5 forward to questions, thank you.

6 CHAIRMAN JACZKO: Thank you. We'll turn to Robert Snook,
7 Connecticut Assistant Attorney General.

8 ROBERT SNOOK: Chairman, Commissioners, thank you very
9 much on behalf of the State of Connecticut for inviting us this hearing today. This
10 is something we have looked forward to, the opportunity to give comments from
11 the perspective of state government. The states are, in fact, important
12 stakeholders in this overall process and we are -- we appreciate being here. I
13 also note that I'm here alone, Vermont, Massachusetts, New York, other states
14 with whom I've worked in the past were not here today. I would second the
15 comments of the Riverkeeper organization with respect to perhaps a very limited
16 reopening. I do happen to know that the New York attorney general's office is
17 preparing some very brief comments they hope to provide and I would urge the
18 Commission to review these when they arrive shortly.

19 As I had mentioned, it is -- we are grateful we are able to be here
20 today, we have reviewed the revised GEIS and we see some excellent points.
21 We appreciate the tremendous work that the staff and the Commission have
22 done in this, the comments on groundwater; I would echo the same comments
23 from Riverkeeper that's important. That's a good step forward and we appreciate
24 that. Our primary comments, however, today will break down into three areas we
25 think that more work needs to be done. This is with respect to the environmental

1 consequences of the continued accumulation of spent nuclear fuel at the various
2 facilities around the country, something that is inevitable now that Yucca
3 Mountain is now longer a feasible project, on the environmental consequences of
4 sabotage or intentional acts and finally, the environmental consequences of
5 emergency preparedness, particularly evacuation issues, something that's of
6 great importance to the state.

7 With respect to spent nuclear fuel, it appears in the revised GEIS
8 we're dealing with a Category 1 issue which is deemed to have small risk. We
9 respectfully disagree. We understand, having reviewed the comments of the
10 staff on this issue in certain other contexts which the Commission, I'm sure, is
11 familiar, the staff's position in this regard. We're not entirely sure you can
12 honestly say that the risk is small. Various documents, NUREG 1738, the NAS
13 study, and others have indicated that there is a profound risk that can occur from
14 fire or other incidences at a spent nuclear fuel facility.

15 One thing I would like to talk about, though, is whether it's properly
16 a Category 1 or a Category 2. I am informed there are approximately 65 of these
17 spent fuel pools servicing 104 reactors around the country and in a certain
18 sense, each one is different. Now they obviously have certain similarities; they
19 all contain spent nuclear fuel. But that's just almost the end of it. If you look, for
20 example, at Indian Point, which is approximately 12 miles from the Connecticut
21 border, and could affect potentially as much as one-third of the population of
22 Connecticut, and then compare it to, say, Fort Calhoun, Nebraska. You will see
23 that the amount of spent nuclear fuel is very different. The topography in the
24 area is quite different. The population is radically different. Wind patterns are
25 different, precipitation patterns are different, seismic issues, tornado issues,

1 agricultural resources. A release or incident at a spent nuclear fuel facility
2 outside Nebraska will not have the same impact as one in Westchester County,
3 adjacent to Fairfield County. It simply is not possible. They are very, very
4 different issues and are really properly part of a site-specific Category 2 type
5 analysis.

6 Similarly, with the possibility of sabotage. Now we understand that
7 this is really a classified and is really part of any sort of national classification
8 system. We understand that that's not properly part of a public hearing. We're
9 not here today, on behalf of Connecticut, to talk about that. We're talking about
10 the environmental consequences of such an event, because an intentional event
11 could very well have very different consequences from an entirely accidental
12 event, particularly because an intentional event is attempting to cause damage
13 whereas an accidental one is not. And what are the environmental
14 consequences? Is that something we can simply say, "Well, this is not really part
15 of the NRC's responsibilities because it is part of an intentional act, it is
16 controlled, for example, by various defense agencies, something of that nature."
17 That may be true, but the NRC does have certain responsibilities vis-à-vis the
18 staffing and the security plants at facilities. So the NRC's role does have at least
19 a tangential role to issues involving intentional incidents.

20 And finally, the one that I'd like to spend the most time about is the
21 evacuation issue. Again, this really hasn't ever been properly subject to GEIS. It
22 is true that there is an evacuation plan. It's really sort of one size and done once
23 for each facility. The problem with that is that the populations and really the
24 growth of areas around nuclear power stations changes. And as we learned with
25 Hurricanes Katrina and Rita, there are environmental consequences from

1 evacuations. When you attempt to displace large numbers of people and move
2 them someplace else, there are consequences from that. Again, Fukushima, an
3 incident that happened earlier this year, which shows that because of an incident,
4 there may be long-term displacements of persons. Again, I understand that we
5 fully recognize that Fukushima has not been thoroughly studied and it will be
6 some time before we can get a full understanding of what occurred there. But it
7 is clear that large numbers of people had to be moved and resettled. And not all
8 the people from New Orleans have ever returned. There are people still living in
9 FEMA trailer camps. And if we were to put the population, let's say, the 10-mile
10 zone around, or larger, around Indian Point and relocate, our current plans are to
11 put that in Connecticut. And part of the reason this is important to the states is
12 that there is no Federal fire department; there's no Federal paramedic
13 organizations. The first responders to any kind of incident or attack on a nuclear
14 power facility will include, primarily, state and local governments. We will bear
15 the burden and the expense. And the long-term expense of moving around
16 displaced people and setting up facilities for them to live, according to the
17 existing plans, will fall upon the states. And I am here to tell you today,
18 Commissioners, as I have mentioned and I have filed comments personally over
19 the years, I have two, Part 350 petitions into FEMA, all to the same effect -- that
20 the plan as it existed at Indian Point will not work. More importantly, it's not the
21 plan that's going to be implemented. As I said earlier, the responders are
22 primarily state governmental resources. The state plan is very different from the
23 approved federal plan. And the most clear example of that occurred earlier this
24 fall, in the response to some of the tremendous wind damage caused by storms
25 this fall.

1 The Federal government contacted the State of Connecticut DOT
2 and asked for permission to move heavy equipment up the Merritt Parkway. We
3 said, "Certainly -- and you'll get as far as Greenwich." Because the Merritt
4 Parkway, which is a limited access state, not Federal, road, which has facilities
5 with underground gasoline tanks so that we can keep vehicles moving in case
6 they run out of gas or in case of emergency -- it's an excellent place, excellent
7 facility. The bridge at the East Rock Connecticut is 10 feet four inches high. Fire
8 trucks and heavy trucks -- heavy equipment trucks are often 11 or more feet
9 high. Heavy vehicles cannot use the Merritt Parkway. The last iteration of the
10 FEMA approved plan for Indian Point would have all the first responders moving
11 down the Merritt Parkway. They won't get to Indian Point; it is physically
12 impossible. As a consequence, the state, through its state police and state
13 DOT's, will be implementing the state plan, and the burdens of this will fall on the
14 state. And this is a simple example, a very isolated example, of why state
15 involvement is important in this regard, because not only the burdens, but also
16 some of the response and equipment and personnel, will come from the states.

17 We welcome this opportunity to let the NRC know our concerns.
18 But we understand that while the NRC has -- is not the party that certified the
19 evacuation plan. That really is done by FEMA. But at this point, neither FEMA
20 nor the NRC are looking at the environmental consequences of an evacuation
21 plan and we urge the NRC to do that.

22 In sum, in these three areas, we see certain weaknesses in the
23 Environmental Impact Statement. There's still time to review these. I have done
24 many years -- actually, the majority of my career I was preparing EIS's for the
25 state Department of Transportation; I understand it is a complex process and I

1 respect very much the work that I have seen done by the staff and by the
2 Commission. We look forward to working with the Commission and the staff on
3 these projects as we go forward. Thank you.

4 CHAIRMAN JACZKO: Thank you very much for your comments
5 and actually, for everyone's comments. I believe we'll start with Commissioner
6 Magwood for questions.

7 COMMISSIONER MAGWOOD: Thank you and thank you for all
8 your comments this morning. A lot of interesting things to talk about and very
9 little time to talk about it. Let me start with Mr. Snook. I just wanted to make sure
10 I understood one thing that you said. It's something I'll look into after this
11 briefing. But it sounded like you were saying that the state emergency plan and
12 the Federal emergency plan are not the same plan and in fact, deviate
13 significantly. Can you elaborate on that a bit?

14 ROBERT SNOOK: Certainly. I'm going back a little bit here --
15 again, there is a no specific state-stamped plan for how to respond to Indian
16 Point. What we have are state highways systems and basic state plans to
17 respond to certain kinds of particular issues, for example, a hurricane alert. Also,
18 with Millstone, which is the nuclear power station in Connecticut, there are plans.
19 Those will go through, sort of, table wars experiences. I will say that the WHIT
20 report of 2003, which the Commissioners may be familiar with, found that the
21 plan for the evacuation of Millstone would work rather well and that includes
22 certain very complex problems, such as Fisher's Island, which is an island close
23 to Connecticut which is actually under the jurisdiction of New York. But we have
24 a system to be able to evacuate Fisher's Island very well.

25 I will say that the last communications that I have received working

1 with the state DOT and FEMA, as part of the FEMA 350 a sort of an appeal
2 process, indicated that there are significant divergences between the state and
3 Federal plans in this regard. The Federally approved plan for Indian Point -- I
4 keep calling it the Federal plan -- it's a federally approved plan. No one in FEMA
5 created the plan; they responded to a plan, which is very, very dated, deals with
6 a very different population, a different language base for the population, et
7 cetera, around Indian Point. But the plan they were using is not the plan that
8 Connecticut could, in fact, put into place, it simply won't work.

9 COMMISSIONER MAGWOOD: And just to be clear, you're saying
10 it's out of date? It's not that there was a conflict when the plan was created, it's
11 just your --

12 ROBERT SNOOK: I would not know as for when the plan was
13 created, unless they had very, very short fire trucks back then, because it
14 wouldn't work on -- the Merritt Parkway, for those who aren't familiar with it, is
15 really for passenger vehicles. However, it's very, very useful for evacuations for
16 two reasons: it's limited access, so that local town -- or actually state officials, can
17 limit access on it and we can use the system as both barrels, using both the
18 north and south lanes to move people in one direction. That's one system for
19 moving large numbers of people.

20 Also, the State of Connecticut owns the gas stations. We allow
21 them to be run by, say, Mobile, I think it is now, but we've overbuilt them. They
22 have large facilities underneath so that they can carry large amounts of gasoline.
23 Because one of the problems with Hurricane Rita is vehicles in Texas leaving
24 Galveston running out of fuel. So what we've built is staged areas that we can
25 move huge numbers of vehicles. But they've got to be passenger vehicles, pick-

1 up trucks, maybe. Anything over 5,000 tons gross weight or anything over 10'4"
2 you're not going anywhere.

3 COMMISSIONER MAGWOOD: Okay. I appreciate that. It's
4 something that I'd like to look into a little bit further. Let me move on to Mr.
5 Musegaas. Your -- appreciate the comprehensive comments that Riverkeeper
6 provided two years ago. It's hard to believe it's been that long, but this has been
7 going on awhile as you noted. Just your comments focused very heavily on
8 unplanned leaks and the fact that the GEIS did not focus much on unintended
9 releases of contaminants, either radiological or non-radiological. What's your
10 view as to how one would analyze, in the context of an EIS, unplanned releases?

11 PHILLIP MUSEGAAS: Well, I think you would -- there are a couple
12 of ways to do it. I know -- or I believe I know -- in the GEIS update that's being
13 proposed the impacts are divided by media, if I understand correctly. Instead of
14 being divided by plant system like they were in the past, they're divided by media.
15 So it could be that you stick to that plan, but they -- the inadvertent releases -- so
16 if they are liquid, and if they're inadvertent releases from, you know, radioactive
17 water leaks, like we've seen at a number of plants across the country, then that
18 would theoretically fall under groundwater and possibly surface discharges to
19 surface water. I think it would make sense to have, rather than dividing up the
20 types of impacts and also having this, I think, a little bit of confusion of having
21 some impacts be categorized as Category 1 and some as Category 2, our
22 proposal would be to make them all Category 2. So if it's -- whether it's a
23 groundwater leak -- or, I'm sorry -- leaks that cause groundwater contamination,
24 leaks that go through groundwater and then discharge to surface water, which is
25 the situation we have in Indian Point, where you have groundwater leaks

1 basically leeching into the Hudson River, it's a navigable waterway. All of those
2 different type of impacts, you know, irregardless of their perceived severity --
3 because I know one of the big issues -- and we've talked about this in the past in
4 dealing with the groundwater contamination issues -- you know, is it more of a
5 public concern or public perception concern, what's the real impact, what's the
6 real public health concern?

7 One thing I think that has to be noted is that the NRC, I think,
8 historically, at least with Indian Point, has always approached groundwater leaks
9 that go into the groundwater at Indian Point and into the Hudson through the lens
10 of public health impacts. And we don't think that's accurate in terms of what a
11 NEPA analysis requires. We believe NEPA requires a broader analysis that
12 looks at all the potential environmental impacts.

13 So I've wandered a little bit from your question, but I think the way
14 to approach it would be to have inadvertent releases -- and particularly if they're
15 releases, liquid effluent releases -- have those dealt with under that section and
16 comprehensively, and so that way you can look at impacts from -- inadvertent
17 releases can then be added to the impacts from routine radiological releases in
18 the cumulative impacts section and in the -- in looking at groundwater
19 contamination, you can also be looking at if there is groundwater contamination
20 and it goes to surface water and it can potentially be affecting other aquatic
21 species, then that assessment can made more efficiently.

22 I don't know if that answers your question, but that's -- I mean, to
23 me, instead of dividing it up among different categories and different sections,
24 have it all in one section, because, you know, it is a new issue over the past, I
25 think it's been the past six years with Indian Point, but this groundwater

1 contamination issue is clearly an industry wide issue and it clearly, you know, is
2 an issue that comes up in relicensing. So it makes sense to me and to
3 Riverkeeper to pool that all together in one section.

4 COMMISSIONER MAGWOOD: Just sort of another question along
5 the same lines and you can answer this quickly. Did the -- the revision focused a
6 lot on consolidating some items to try to reduce the number of items, which I
7 think is generally a good thing, just as administratively -- just as you reviewed the
8 document, you looked at those consolidations, did you see the consolidations
9 would be a net benefit from your perspective? Was it doing more good than
10 harm, as you went through the draft?

11 PHILLIP MUSEGAAS: I think it varied. And I mean, one that I can
12 think of off the top of my head is looking at different types of impacts from
13 thermal discharges, from once-through plants with once-through cooling
14 systems. I know in the 1996 GEIS, that's from an environmentalist and from
15 someone who works on water issues almost exclusively, that was a very
16 confusing system. And so I think this -- the attempt, I think, in this case to put,
17 you know thermal impacts under one category is -- makes sense. So that, I
18 think, in that respect, it works. I think there still could use some improvement in
19 terms of the language in the GEIS. I know that current language in the proposal
20 refers to the fact that the NRC staff believes impacts from thermal discharges are
21 small, but there may be some variations from site to site and so it should be a
22 Category 2 issue. I don't necessarily see a reason why there needs to be a
23 predisposition to rate the impact ahead of time in the GEIS, but then require a
24 Category 2 analysis. I think that predisposes that you're going to find small to
25 moderate impacts and not large impacts.

1 And similar to spent fuel storage, similar to a number of these
2 impacts, whether they're Category 1 or Category 2, they're very different across
3 plants. Indian Point, for example, is located on the section of the Hudson River
4 that is federally -- that is designated as significant habitat, both by Federal
5 government and by the State of New York. And I know it's not the other plant
6 that's discharging and withdrawing water from designated -- an area --
7 environmental sensitive area; I'm sure there are others. I'm sure there are also
8 plants that withdraw water from areas that are not as biologically important. So
9 that needs to be taken --

10 COMMISSIONER MAGWOOD: I appreciate that. Let me ask Mr.
11 Bailey a quick question before my time runs out. Actually, let me just ask you to
12 comment on this issue of unintended releases. And since TVA does these EISs
13 as well. I'm interested in thinking about how one would even analyze future
14 unintended releases in its renewed license time frame. So if you could comment
15 on that.

16 JACK BAILEY: I think -- and again, there's a lot of people in this
17 room that have lived and breathed all these issues probably for the full duration
18 of the GEIS being underway and there's others of us that sort of look at it from
19 time to time as we manage the business. And I've tried to understand this one in
20 preparation for coming here and one of the things that jumps out at me when I
21 review all the comments that have been made and other things is there is not a
22 clear understanding by the parties, and maybe it has not been clarified by the
23 NRC, per say, on what things are adequately dealt with by other regulations or
24 are agencies within their processes, and we should be able to take credit for
25 those; and water adequately addressed as the original environmental impact

1 review of an operating nuclear plant versus just a license renewal and/or what's a
2 safety review issue versus an environmental issue. To me, all three of those are
3 very easy to confuse because we would agree with everybody that says when
4 that happens, there's an environment impact to that. The question is, did we
5 already deal with that environmental impact when we put the design basis limits
6 on what was going to happen if we operate this plant, you know, all the time in
7 there.

8 So getting to the groundwater contamination and other things, it's
9 our understanding, and NEI, I know has commented on this in much more detail,
10 that most of what we're seeing now, and I think virtually all we've seen, are
11 bounded by what we contemplated when we operated a nuclear power plant in
12 the first place. And usually if a piece of equipment is broke, you don't call that an
13 environmental issue; if you're operating the way you're supposed to, you fix it.
14 And so things like leaks, you need to fix them within a certain limit and you're not
15 allowed to exceed the health and safety public limits of the community when you
16 release things from the plant, or that's why we have wells monitoring them and
17 everything else on the sites.

18 So there's a lot of aspects of it that -- it's not an easy answer to
19 your question, but I think the answer to it lies in sorting through the fact that we
20 had an original EIS -- these are supplemental EIS's. We're operating the existing
21 plant for a longer period of time within the same limits of health and safety
22 requirements that we always have. And as a result --

23 CHAIRMAN JACZKO: Mr. Bailey, I'm going to -- maybe if you can
24 wrap, because we want to get to some other questions.

25 JACK BAILEY: Okay.

1 COMMISSIONER MAGWOOD: Thank you very much.

2 CHAIRMAN JACZKO: Commissioner Ostendorff?

3 COMMISSIONER OSTENDORFF: Thanks, Chairman. Thank you
4 all for your presentations; I found them very helpful. I'm going to start out with
5 this end of the table. Mr. Anderson, you made a comment that, as I understood
6 it, that there are several such situations where you did not believe the technical
7 basis was adequately stated in the proposed rule. Could you give us some more
8 cogent or significant examples of that?

9 RALPH ANDERSON: Sure. I'll just -- excuse me -- again,
10 mentioning that we went ahead and dealt separately with each of those issues.
11 I'll give you one example with --

12 COMMISSIONER OSTENDORFF: I would be interested in what's
13 most -- the biggest one that rises --

14 RALPH ANDERSON: Yeah -- well, one example would be the
15 addition of physical occupational hazards to the EIS, which some people more
16 popularly called the "OSHA issue." The single paragraph that is provided as the
17 justification mentions that the issue was raised in a number of public meetings,
18 that it's regulated by the occupational safety and health administration and that
19 it's an important issue.

20 COMMISSIONER OSTENDORFF: Okay.

21 RALPH ANDERSON: And so no nexus is given to either NEPA or
22 license renewal.

23 COMMISSIONER OSTENDORFF: Okay. Let me -- I'm going to
24 stay with you but kind of dive back into a question Commissioner Magwood had
25 started to discuss with Mr. Musegaas that dealt with, you know, the thermal

1 impacts was an area, as I understood it, that you sort of felt that was being
2 treated better under the proposed rule than under the 1996 version. I'm just
3 trying to look at big picture, where do we see, you know, from a 100,000 foot
4 view, what's the biggest benefit, from your organization's perspective -- and I'll go
5 down the line -- of the changes in the proposed rule?

6 RALPH ANDERSON: Well, especially in terms of the restructuring
7 and combination of issues, we believe that that does offer benefits in several
8 ways. One is in organizing the information to present in the environmental
9 report. We think there's a more logical association of the way the issues are
10 pulled together, so we think it could be beneficial in the research that needs to be
11 done and the preparation of the submittal.

12 Most importantly, we think that it improves the transparency of
13 submittals because it allows people to see things in the composite rather than
14 having to search through an entire voluminous report, if they're interested in
15 some particular issue. The comment that my colleague made, I would agree with
16 that. By having it all in one place, then you're able to get a better appreciation.
17 So those would be two examples.

18 COMMISSIONER OSTENDORFF: Okay. Okay.

19 RALPH ANDERSON: Of seeing it as an enhancement.

20 COMMISSIONER OSTENDORFF: Thanks. We'll go down the
21 line.

22 JACK BAILEY: I'll be very specific. The transmission review
23 requirements on transmission system is a big plus. Used to have to go out five
24 miles and look at the environmental impacts -- or approximately that. Now
25 they've brought it back in to just -- connection to the transmission system of the

1 plant knowing that the transmission lines are going to be in service probably
2 whatever happens going forward, unless you have a specific exception to that.

3 COMMISSIONER OSTENDORFF: Okay.

4 PHILLIP MUSEGAAS: I think from a high altitude level, we would --
5 you know, we're supportive of the decision to make groundwater contamination a
6 Category 2 issue.

7 COMMISSIONER OSTENDORFF: Okay.

8 PHILLIP MUSEGAAS: We believe it should be reorganized, we
9 believe it should go a bit further, as I discussed somewhat. On the thermal
10 discharge was a good example of where I think the -- there was some attempt
11 made to clarify and kind of streamline that -- the assessment of that impact, and
12 we agree with that and we support that. We continue to disagree on some of the
13 bigger picture issues, which you're aware of. That's all.

14 COMMISSIONER OSTENDORFF: Okay, thank you. Mr. Snook?

15 ROBERT SNOOK: Thermal groundwater. As to the power lines,
16 we tend to agree. Power lines, power lines, power lines. We had a
17 consideration at one point of taking one of old facilities and putting in a regular
18 gas fired plant there. And it's just going to be power lines being used, that makes
19 sense. Also, some of the comments on the historical and cultural resources on
20 making that site-specific we thought was very helpful, as well.

21 COMMISSIONER OSTENDORFF: The reason I ask the question
22 is, you know, the Chairman, I think, could probably acknowledge that this has
23 been, you know, underway for a long time and at the end of the day, we want to
24 kind of sit back and say, well, was all this worth it, to have taken this long a
25 period of time and recognize there's still -- there are disagreements and there are

1 some problems, depending upon which chair people are sitting in. I'm looking at
2 the holistic approach to see, you know, is this better -- and I'm not going to say
3 perfect -- is it better than the previous rule is kind of where I was headed with that
4 question.

5 A comment for Mr. Snook -- and I'll tell you, I appreciate very much
6 your adding the specificity of your Merritt Parkway example. I think taking things
7 into a specific physical context is very helpful as opposed to abstract. I lived in
8 Connecticut both in the 70s and the 80s. I lived in New York, I have two adult
9 children living in Manhattan, so the Indian Point, Connecticut evacuation issues
10 are -- I understand your concern on those. So I wanted to thank you for
11 identifying the specific example. But I do want to ask you a question. I'm going
12 to start out with you, then I'll ask Mr. Musegaas to address. And this deals with,
13 perhaps, a communications issue, but there are -- both of you have had
14 examples of items that you raised in your testimony that you think should be
15 considered as part of the GEIS process, license renewal process that are not
16 currently, whether it be security, spent fuel or emergency preparedness kind of
17 issues. And I just want to maybe kind of take a pulse point here on one example.
18 I think, Mr. Snook, you raised this, but Mr. Musegaas did as well in the context of
19 Yucca Mountain. Let's talk just for a moment about spent fuel, on-site and in the
20 context of the Yucca Mountain, where that is, where the agency's waste
21 confidence rulemaking is, and then some follow-on from the Near-Term Task
22 Force from Fukushima, looking at spent fuel pool instrumentation and cooling.
23 I'm trying to get a better -- just to kind of use this as a venue to ask the State of
24 Connecticut, you know -- are we not -- let's just assume, for a moment, that we're
25 not going to change the scope of what's in this GEIS, but that we do have an

1 obligation to communicate effectively what we are doing in spent fuel. Are we
2 communicating effectively to your state with respect to what we're doing in the
3 context of waste confidence rulemaking and what's happening in the Near-Term
4 Task Force and the NRC's actions with respect to spent fuel pool concerns?

5 ROBERT SNOOK: Yes and no. I will point, I'm sure the
6 Commission is aware -- certainly your Counsel is aware -- that there is ongoing
7 litigation that Connecticut is, in fact, a party to before the DC circuit right now -- in
8 fact, I think our reply brief is due next week -- that deals with the waste
9 confidence decision. So I do not --

10 COMMISSIONER OSTENDORFF: And I'm not trying to get the
11 merits or anything, I'm just trying to see, do you understand what the -- I'm not
12 asking, "Do you agree with the agency's position?" I'm trying to figure out, do
13 you understand where we are as an agency?

14 ROBERT SNOOK: Mostly, yes. We believe -- it is my personal
15 opinion, I should say -- let me take a step back. It is my opinion, as an assistant
16 attorney general -- I'm not speaking out as the attorney general -- that I have an
17 understanding of what the staff and what the Commission are doing, in fact. One
18 of the things we don't quite grasp, from the EIS perspective, is why it appears
19 that certain time periods are handled very differently. That, for example, the
20 environmental impact statement for the renewal is handled differently from the
21 area of -- from the point -- from the license determination to 60, and from 60 on to
22 two or three hundred or whatever it is. There appear to be differences and I, to
23 this day -- in fact in preparation for this hearing, I earnestly attempted to
24 understand the Commission's rationale and I did not, and I have worked in this
25 area.

1 But in broad perspective, I have seen many communications from
2 the Commission -- we appreciate those, thank you for those. It's helpful to keep
3 us informed and we will attempt to keep you informed of our concerns, even if we
4 do disagree on these matters. But there are certain discrete areas where I do
5 not understand why certain matters are handled one way as opposed to another.

6 COMMISSIONER OSTENDORFF: Okay, that's helpful to hear
7 that. Mr. Musegaas, do you have anything you want to add to that?

8 PHILLIP MUSEGAAS: Sure. Just on a couple of areas. And I
9 think -- I mean, the general answer, is yes and no. I mean, I think we're -- you
10 know, I think it's generally understood that the Commission is looking at spent
11 fuel risks following Fukushima. I think that the two I would comment on are the
12 waste confidence rulemaking and the -- and also just going back to the GEIS
13 process on waste confidence. I think the question becomes if, to the extent the
14 public is aware that there is some environmental scoping process that's just
15 begun -- I believe, that, you know, I just got notice of that last week -- that, you
16 know, that that -- there may be an EIS process that comes along in that. Again, I
17 think I share with the Connecticut AG has concerns about in terms of what
18 timeframes we're talking about. Also, you know, it's encouraging that the
19 Commission is looking at these issues in different contexts and in different
20 processes, but there's very little information about how these are all going to be
21 coordinated and fit together. And I think that's a big concern with the GEIS,
22 because if there is an environmental review process or assessment process, it's
23 going to happen with waste confidence. We welcome that, we think that's long
24 overdue, but you know, what's -- if that's going to happen over -- under a four to
25 six year, five to eight year process, by the time that's concluded or we have some

1 initial drafts, requirements or assessments on paper, it could be that the GEIS is
2 finalized and plants that are undergoing relicensing have already gone through
3 that process without looking at any of that. So I think there has to be a real effort
4 made to try and figure out how these things are coordinated, what timeframes
5 they work under and communicate that to the public.

6 COMMISSIONER OSTENDORFF: Okay. Thank you. Thank you,
7 Mr. Chairman.

8 CHAIRMAN JACZKO: Commissioner Svinicki?

9 COMMISSIONER SVINICKI: I want to join in thanking each of you
10 for your presentations and your responses to my colleagues' questions. The few
11 questions that I had you actually did a good job of addressing in your
12 presentations, so I'll also acknowledge that your organizations have much more
13 detailed comments that we didn't really give you time to cover all of that. But of
14 course the Commission has the written comments that your organizations have
15 submitted in front of us as well so I don't think I have any additional questions.
16 Thank you, Mr. Chairman.

17 CHAIRMAN JACZKO: Commissioner Apostolakis.

18 COMMISSIONER APOSTOLAKIS: Thank you, Mr. Chairman, and
19 thanks to all of you for the presentations. I found them very useful, as well. I
20 was reading the written statements from Connecticut and from Riverkeeper and
21 there are a couple of things that struck me that I would like to have more
22 information or elaboration. Mr. Snook, you mentioned in your presentation but
23 you also say here that "evacuations have collateral environmental
24 consequences. Moving significant numbers of people and resettling them for the
25 short or longer term will affect natural resources in the host area." And you go

1 and argue why this is important, but you are not -- I'm sorry.

2 ROBERT SNOOK: I --

3 COMMISSIONER APOSTOLAKIS: But you are not suggesting
4 what the Commission could do about it. I mean, I can see the host areas being
5 all over the place. What would the GEIS include to satisfy you that this issue has
6 been addressed properly?

7 ROBERT SNOOK: Excellent. Thank you, that's an excellent
8 question. Those who study this area, the emergency evacuation, there are in
9 fact professional journals, there are people who spend their whole lives dealing
10 with how to move people in the face of some kind of natural or manmade threat.
11 Florida has had 150 hurricanes in 100 years. They practice this very well. So,
12 for example, in the context of a revised, you know, GEIS and take the two
13 facilities, Millstone and Indian Point, and I'm using these as simply as examples.
14 They're illustrative only. In Millstone we have a pretty good idea where people
15 would have to be moved to get outside of a plume. We have a fairly good idea of
16 prevailing wind patterns. We also know the population of parts of Connecticut
17 and we know where we can move these people and where we could not. The
18 current plans for Indian Point, considering the extraordinary populations of
19 Westchester County and Fairfield County, are to move large numbers of people
20 to the interior of Connecticut and certain numbers up into Springfield. This we
21 know or can posit based upon what the plan says and what current experiences.

22 Now, with Connecticut, and we talk about environmental
23 consequences, one of the foremost ones that would occur are water diversion
24 permits. Part of the State of Connecticut, most in the municipal areas, have
25 municipal water supplies; that is not true of much of the rural areas; they're all

1 well-driven. As a consequence, depending where we move people, we're going
2 to have to put water for them. And again, I fully recognize that we normally deal
3 with approximately a 10 mile area in certain circumstances. And I understand
4 now the Commission has suggested that they could expand that if necessary.
5 So we're at first not sure exactly what radius we're going to be dealing with. We
6 don't -- the populations that we do know about, both in the 10, 12 or even the
7 shadow evacuation, those people will voluntarily self evacuate, we may be
8 talking significant numbers of people.

9 We do know that between 18 and 24 percent of a population that
10 receives an evacuation will not evacuate. This is consistent, almost despite the
11 kind of natural disaster. So at the GEIS level, you could look at an area and
12 draw certain zones of what areas of influence, with wind patterns, with possible
13 amounts of radionuclides that could be released, what areas would be ordered to
14 evacuate, what places might shadow evacuate, what people might shelter in
15 place. I have a pretty good idea where many of them would go in Connecticut,
16 and I'm also fairly confident we can't provide water for them at this point.
17 Therefore, we're going to have to create areas to house these people and to
18 provide water and to provide shelter for these people. All three of those will have
19 collateral environmental impacts and I'm particularly concerned about my water
20 resources.

21 COMMISSIONER APOSTOLAKIS: And I really understand the
22 argument you just made. It's not clear to me, though -- okay, so the GEIS
23 identifies this as an issue. Then what? Then they plan differently? I mean, the
24 licensee will plan differently? That they would not be sending all these people
25 there or they will be forced to supply water or what?

1 ROBERT SNOOK: Oh, that -- what they would have -- what we
2 would envision from my personal experience in these areas and, again, I'm not --
3 you know, I haven't spoken to the staff or to Entergy or to any of the industry
4 models. What they'd have to do is come up with alternatives. How could people
5 be moved? That's the first one. Where could they move them and what sorts of
6 resources are available, public or private, to address their needs?

7 COMMISSIONER APOSTOLAKIS: So that's -- that really falls into
8 the design of their emergency plans.

9 ROBERT SNOOK: Yes, and I could -- at this point, FEMA, in
10 certifying the plans, does not provide any NEPA review.

11 COMMISSIONER APOSTOLAKIS: I see.

12 ROBERT SNOOK: I can guarantee you the state hasn't done it. I
13 do have -- from other experiences, we do understand where there are certain
14 areas of critical resources in the state where we might have to move people but
15 we may not have the water for them.

16 COMMISSIONER APOSTOLAKIS: Thank you very much . That
17 was very helpful to me. Mr. Bailey or Mr. Anderson, you have any comment on
18 this? You can say, "No comment," if you like.

19 [laughter]

20 RALPH ANDERSON: Thank you. I'm sorry.

21 COMMISSIONER APOSTOLAKIS: Go ahead, please.

22 RALPH ANDERSON: No, I'm sorry --

23 COMMISSIONER APOSTOLAKIS: Do you have any comment on
24 what Mr. Snook just said?

25 RALPH ANDERSON: No, I'm still -- been reviewing material --

1 COMMISSIONER APOSTOLAKIS: Okay.

2 RALPH ANDERSON: -- that I --

3 JACK BAILEY: I --

4 COMMISSIONER APOSTOLAKIS: Yes, please.

5 RALPH ANDERSON: Well go ahead.

6 JACK BAILEY: Well my only comment on it would be, getting back
7 to my bigger context, the emergency planning requirements exist to license a
8 plant and to operate it now. If they have shortfalls in them, well according to
9 what he's saying, then there's a broader context to what he's suggesting in that
10 any environmental review for a new plant ought to include that impact review
11 also. And then when we get to the GEIS part of a license renewal, it would be
12 less of an issue.

13 COMMISSIONER APOSTOLAKIS: I appreciate that and in my
14 discussions, my staff, we also had the same problem. It seems that there are
15 questions that really should be addressed to this particular supplemental GEIS
16 and then broader issues that -- you know, like, why, for example, does license
17 renewal look only at the aging issues and not other things? I mean -- but these
18 are two separate issues. I appreciate your point. But I have another question for
19 Mr. Musegaas which is related to emergency planning. You have a statement
20 here that I find very intriguing. You say, "Indeed -- however, this reasoning is
21 flawed since NRC's emergency preparedness regulatory scheme is inherently
22 deficient due to the purely procedural nature of the emergency planning
23 standards found in CFR which fail to set actual benchmarks for determining what
24 constitutes a workable emergency plan." What kinds of benchmarks do you have
25 in mind? I would be very interested in learning this.

1 PHILLIP MUSEGAAS: Sure, and thank you for the -- that's a great
2 question. One of the benchmarks that we have I think proposed or commented
3 on in the past, and we've commented extensively on the emergency planning
4 regulation updates, one of our concerns has always been that in 50.47
5 requirements, the 16 planning standards, all that, they're procedural in that they
6 are not performance based standards that plants have to comply with, from our
7 perspective. And so I think the easiest one to talk about in a short amount of
8 time are evacuation time estimates. These are -- in the past, the counties
9 surrounding -- I know Westchester County, where Indian Point is located, has
10 done studies I think twice. They've hired outside contractors to conduct studies
11 of -- under different scenarios, different times of day, different weather conditions,
12 how long it would take to evacuate, you know, 10 percent, 20 percent, all of the
13 10 mile zone, you know, every different scenario you can think of within the 10
14 mile EPZ. And they came up with a whole list of numbers ranging from, you
15 know, four hours to evacuate a five mile radius around the plant in good weather
16 on a Sunday afternoon to 12 to 14 hours to evacuate a five mile zone on a snowy
17 day in December. So those studies are done by the counties. I don't believe
18 they're done by the applicant. Under the emergency planning upgrades, I think
19 there's maybe a consideration that those should be prepared. But at that point,
20 the analysis ends and there's -- nothing is really substantively done with that
21 information once it's collected.

22 I would suggest that it would make sense for the Commission to
23 have some idea, under different scenarios and under different accident
24 scenarios, about at what point does it become too long a time to evacuate people
25 from under a plume? So -- and I'm simplifying this for time sake and it's -- I don't

1 mean to make this a crude assessment but is -- should all plants in the country
2 be required to -- if they have an accidental or intentional attack that causes a
3 release, should they be required to evacuate a five mile area around the plant in
4 12 hours or less, 14 hours or less? I don't know what the number is but I think
5 that's a reasonable thing that can be understood and can be assessed and if
6 you're -- this is all based on modeling to begin with. We're not talking about
7 actual drills here but that is something that plants should be held to as a standard
8 and at this point they don't have standards.

9 COMMISSIONER APOSTOLAKIS: The way I understand it is -- I
10 mean, I can't imagine that the staff, when they judge the validity of emergency
11 plans, they don't consider things like that. So, the way I interpret your comment
12 is that, yeah, they probably do that but the whole thing is lost in their process of
13 thinking about it and approving it. You would like to see more explicit
14 benchmarks that say in black and white if the time to evacuate exceeds this
15 number then do this. In other words, it's not clear to a third party how they will be
16 convinced that what the staff is doing makes sense to you, for example. It's not
17 really that -- I mean, you are not disputing that they are doing it. I mean, they
18 must be doing a lot of that.

19 PHILLIP MUSEGAAS: I --

20 COMMISSIONER APOSTOLAKIS: But you don't know that they
21 are actually doing it.

22 PHILLIP MUSEGAAS: I don't know that they're doing it. I've been
23 working on this for six years and I'm not an expert on emergency planning but I --
24 my understanding is -- you know, I don't know what happens at the actual drills.
25 The drills themselves are, I think, proprietary information. But it would make

1 sense to explain what they are looking at in the criteria and I think it makes
2 perfect sense to have enforceable standards that the public can understand.
3 And if the public feels it necessary to attempt to enforce those standards through
4 the 2.206 process or somewhere else, or through the 2.802, then that should be
5 available to them. But at this point, emergency planning and the standards that
6 are applied in those assessments is a black box. The public does not
7 understand how this works.

8 COMMISSIONER APOSTOLAKIS: I think this comes back to
9 communication that the Commission also – thank you Mr. Chairman.

10 CHAIRMAN JACZKO: Well thank you. And I will just follow up,
11 and I think it's an interesting question that Commissioner Apostolakis raised. I'm
12 not so sure we do what he -- what you were saying we do. I mean, as I
13 understand it, there is no regulatory standard that specifies a time for which
14 evacuation is unacceptable. As a licensing basis, the licensing requirements are
15 that utilities develop a certain number of things, one of which is evacuation time
16 estimates. They work with the local and the state entities to develop that. FEMA
17 then does exercises. FEMA, if they find deficiencies in the plans, they find those
18 things they can then specify. I'm looking at Eric and Tim if I think say anything
19 wrong. But nowhere do we say a reasonable assurance is lost because an
20 evacuation time estimate is determined to be 67 hours, to take kind of an
21 extreme example. That's not a regulatory standard nor a regulatory basis. The -
22 - you know, that is information that would be used in the event of an actual
23 release if the evacuation time estimate said 67 hours, you're going to be sitting in
24 the middle of a plume. The protective action recommendation then would be
25 don't evacuate. It would be shelter in place. And that's how they're used in that

1 regard. So they're not -- there is no regulatory standard in that regard by which
2 the staff evaluates the plan to determine if it meets an acceptable public health
3 and safety metric. So that's the difference.

4 I wanted to -- and I think Commissioner Apostolakis highlighted this
5 issue that -- you know, some of these things and I think -- actually, I have to
6 admit, this is a very new concept but I've not heard this idea before that Mr.
7 Snook raised. I think -- I mean, I have in the past said that I think, quite frankly,
8 that EP reviews should be part of license renewal. Up until today, I wouldn't
9 have said that that had an element in the environmental review but I think now
10 that there may even be an issue. That's probably not, again, a license renewal
11 issue but perhaps just a NEPA issue in general. Should we be looking at the
12 environmental impacts of an evacuation? I mean, I think we -- you raised some
13 interesting issues. There clearly are, if you have a displaced population,
14 environmental impacts that could occur. I think, to some extent, the issues of, I
15 think as Mr. Musegaas raised, about EP is really more of a Part 54. It's really -- it
16 gets more to the reasonable assurance determination rather than, I think, the
17 NEPA review and -- you know, and, I mean, personally I would think we'd be
18 better off if we had a requirement to review it at the time of license renewal. I
19 mean, I think that makes sense. I mean, there -- you know, clearly, populations
20 change, the densities and the development change. I remember when I was up
21 in -- touring around Indian Point with one of the local emergency management
22 officials and, you know, he drove me by into a housing development and he said,
23 "You know, we can't stop them." And so they -- you know, the permitting for
24 housing is not necessarily controlled by the emergency management department
25 and new populations can enter and yet -- then that becomes a burden on the

1 emergency management personnel to deal with potentially evacuating an
2 additional population. So I think, to some extent, there is an issue. I think some
3 of it is -- is a -- just more on the safety review itself and probably is something
4 that would make sense given the nature.

5 But there is this additional issue, which is in the event of an
6 accident, how do you -- you know, how do you account for the impact -- the
7 environmental impacts of a displaced population? I would suspect -- I don't
8 know, maybe we could ask the staff that -- I don't know that they consider this
9 under the severe accident analysis but that, to some extent, might be a place
10 where it would make sense is to incorporate that if you're considering under
11 severe accidents evacuations and then you would naturally then consider the
12 impacts of that. I don't -- Melanie consider that a question that you're going to
13 get asked. So it's an interesting -- it is an interesting concept and something that
14 I think is worth considering as we go forward. It's -- obviously it's very difficult to
15 change our requirements after we've done this for such a long time.

16 One other -- one question -- I think this, again, follows up a little bit
17 on Commissioner Apostolakis asking about some of these issues. Again, I think
18 the EP in particular. And I wanted to follow up on this a little bit. Would you
19 consider this to be something, if we were to consider it, right for the GEIS, or
20 would it -- well, as a Category 1 or a Category 2 issue? Maybe I could put it that
21 finely. Namely, something -- I mean, to me -- well, I'll let you say what you think.

22 ROBERT SNOOK: My office has considered it a Category 2 --

23 CHAIRMAN JACZKO: Okay.

24 ROBERT SNOOK: -- because we're looking at the environmental
25 consequences. Now, as for performance standards for evacuation, again, to my

1 knowledge, it hasn't been done. Does it make sense? Yeah. I'm hearing what
2 you're saying.

3 CHAIRMAN JACZKO: Right, and that's a totally different thing, too.

4 Yeah. Yeah.

5 ROBERT SNOOK: As the environmental consequences because
6 of the differences in receptors, and the population base, and the fact that I'm
7 speaking from DOT -- Connecticut DOT. Route 95 was designed many years
8 ago for a total of 80,000 VDT, vehicle daily trips. We're now at 140,000. We fail
9 every day at rush hour. This is a change which will affect, you know, how and
10 where we can move people. And as I tried to mention before and failed to do, in
11 Connecticut we divide our watersheds so that if we move, for example, a large --
12 for any reason. You put a golf course someplace, you need more water for it and
13 there's not enough water near it we have to get a water diversion permit. Moving
14 water from one watershed to another is a big issue in Connecticut. And so,
15 consequently, while there are regs and things we can examine and you can
16 examine the environmental impacts in that sense, it is something, to my
17 knowledge, that has not been done today.

18 CHAIRMAN JACZKO: Yeah. Well that's helpful and I appreciate
19 that. It does sound to me like it would be something that would be more site
20 specific in that regard and fit more naturally as a Category 2 issue. Sorry, I just
21 have to look at my questions now. The -- and Mr. Snook I'll ask you this and you
22 may not be able to help me too much with this but you may have some sense --
23 or Mr. Musegaas -- well, actually, or Mr. Bailey or anyone. One of the issues that
24 we have tried to work on and I think are working to better improve and enhance
25 is our outreach to tribal governments. Can you give -- any of you give me your

1 perspective and your sense of how you see that interaction, for instance, from
2 the state perspective? How you interact with them if there are tribes? And I think
3 there are probably some --

4 ROBERT SNOOK: There are several there.

5 CHAIRMAN JACZKO: -- tribes in Connecticut that -- and are they -
6 - do you think that they're engaged in the process? Or, from your experience,
7 are you seeing them engage in an appropriate way where -- or do you think we
8 have the right kind of outreach to ensure that they are engaged if it's
9 appropriate?

10 ROBERT SNOOK: Interestingly enough, in the litigation I
11 mentioned earlier, the Prairie Island Indians have been engaged.

12 CHAIRMAN JACZKO: [affirmative].

13 ROBERT SNOOK: Connecticut's a little unique because the --
14 well, the state existed before the country existed so it interacted with its state
15 tribes and has a state registration, so a state review, and state tribes which are
16 not federally recognized. And then we have federally recognized tribes as well.
17 So we have sort of a two-part system. To my knowledge, none of the state-
18 recognized tribes have ever been contacted in any of these and one of them is
19 potentially within the area. That would be the Scatacook Indians.

20 As for the federally recognized tribes, I have not had enough
21 experience with them in the context of Indian Point but I do believe that they are
22 rather heavily involved in the Millstone issue. But I can check up on that further.

23 CHAIRMAN JACZKO: Well thanks. That's very helpful actually.
24 That may be something we need to consider as we go forward, to make sure
25 we're doing the appropriate outreach that we need to do. One last question I

1 wanted to turn to then. I think, Mr. Musegaas, you raised this issue of Fukushima
2 and some type of limited reopening and comment on this issue. Can you give
3 me a sense of how you think we could do that?

4 PHILLIP MUSEGAAS: I don't know, frankly. I think that part of the
5 problem, and just stepping back a little bit from your question, is they're a part of
6 the challenge with these GEIS updates is you finalized the GEIS in '96. There
7 was supposed to be a 10 year update that started I think seven years in and you
8 had some open comments and there was some process that went on and then it
9 was dropped for a while. Perhaps part of the challenge is trying to do this all at
10 the same -- do the entire GEIS all at once every 10 years. That seems like a
11 very large ship to steer along at that speed and so what ends up happening is
12 what we're doing here today, is we're years behind in the process and
13 unfortunately events and other things have happened that now render parts of
14 the GEIS, in our perspective, less than current.

15 CHAIRMAN JACZKO: [affirmative].

16 PHILLIP MUSEGAAS: And so how do you get around that? And, I
17 mean, Fukushima is probably the most vexing of those. I think there are ways
18 that you could get around Yucca Mountain. You know, you could address Yucca
19 Mountain through the waste confidence process, perhaps, and if it was
20 elucidated how that was going to integrate with this GEIS process then there may
21 be some benefits there. But with Fukushima, and again I'm -- you know, if it's
22 going to take several years to figure out, to get all the information from licensees
23 that the NRC's looking for to do the seismic reanalysis, the SAMG, or all those
24 things that you talking about extensively, how does that fit back into the GEIS?

25 One thing I would suggest or propose is that -- I mean, my

1 understanding under the current system, either under the 1996 GEIS or the
2 proposed update to the GEIS, the staff and the applicants certainly have the
3 flexibility and, in essence, the Commission has the flexibility to address new
4 issues under the new and significant information rubric. I mean, that was the
5 reason that section was put in there when the GEIS was developed was after a
6 lot of interplay with the EPA and other Federal agencies that were concerned that
7 if you didn't have that door remain open then this would become a very closed
8 process. Now, we differ on how well we think that works but I think there's
9 flexibility there that could be used. And if information comes out of the
10 Fukushima review that could be fed into individual license renewal reviews, it
11 seems as if you could do that without revising the entire GEIS again to reflect
12 Fukushima knowledge. Is that --

13 CHAIRMAN JACZKO: No, that's very helpful and that --

14 PHILLIP MUSEGAAS: I think that's the way to do it.

15 CHAIRMAN JACZKO: Thank you.

16 PHILLIP MUSEGAAS: I'm sure that adds a burden to the
17 applicants and I don't --

18 CHAIRMAN JACZKO: [affirmative].

19 PHILLIP MUSEGAAS: -- think Ralph would be very happy about
20 that but I think it's worth considering looking at the existing framework and
21 figuring out how -- you know, what tools are there at your disposal to fit some of
22 that information into the process sooner rather than later. And if I can just --

23 CHAIRMAN JACZKO: Yeah, sure.

24 PHILLIP MUSEGAAS: Ten more seconds. You know, in looking at
25 the GEIS update process, perhaps it would make sense to consider breaking

1 down the GEIS to go -- and maybe there doesn't need to be another review
2 because once you do this one, most of the existing plants are going to be
3 relicensed so I don't know what the next iteration of this process is beyond that.
4 But it may make more sense and be more time efficient to break down the GEIS
5 into different sections so you do updates of different sections at different times.
6 Now, may -- that may create more problems than it solves but I think it's just -- if
7 part of the reason this is -- again, like I said at the beginning, it's a very large
8 process and it takes a very long time and it's bound to end up being deficient in
9 some respects.

10 CHAIRMAN JACZKO: Well, that's very helpful and I think that's useful for
11 us to keep in mind as we always do have the new and significant -- but I think it's
12 certainly worth exploring ways -- if we can do a very limited reopening. We do
13 have -- obviously this is not scheduled to come to the Commission for some time,
14 so perhaps if there is a limited way at least to perhaps clarify how we intend to
15 handle these things. If nothing else, that will at least provide some information.
16 But I -- you know, it -- there is a point at which we do have to cut it off and there
17 is always the site specific and the ability to address it with new and significant
18 information so appreciate that. Any other questions or comments? Sure.

19 COMMISSIONER MAGWOOD: I'm glad you brought up the issue
20 of reopening again. I wanted to see if the industry participants had a comment
21 on reopening this even for a short time. Do you have any concerns with that?
22 Would that create any special issues for you?

23 JACK BAILEY: Well, for me, it's problematic on a -- in the sense
24 that there's some -- depends on when you resolve the issues and issue the final
25 and how many changes there would be in the final version of the draft. As we

1 talked about, we are submitting an application a year from this month that's right
2 now trying to guess on what the answers to some of those questions were. If it's
3 going to extend it out so far that we're well beyond that period of time, it's going
4 to affect somebody behind us, not us, in the same way but -- so that's why our
5 preference is -- remember, these issues have -- been -- they've grown over the
6 last decade of reviewing applications and in many cases the NRC ask a lot of
7 these questions in RAIs today and they can still ask them some of the changes
8 that you are contemplating might happen in RAIs tomorrow. And every two years
9 we have to update our license renewal work anyway, so it's not like this is only
10 one bite at the apple and a lot of this stuff -- to me, I would move forward, try to
11 finalize the good work that's been done, get it defined for people, help them
12 move forward and then get working on what changes are needed after that.

13 CHAIRMAN JACZKO: Anything else? Thank you. We'll take a
14 quick break.

15 [break]

16 BILL BORCHARDT: Thank you. As I'm sure you're aware, the
17 license renewal application and the staff's review is really -- it really consists of
18 two parallel processes: one, the safety review, and the other an environmental
19 review. Just over a year ago, we completed a revision to the Generic Aging
20 Lessons Learned, which is the safety review guidance and it took advantage of
21 all the operating experience and the experience over the last years to provide the
22 update to the safety side of this review activity. What we've been talking about
23 this afternoon and what we will present in a few minutes has to do with the
24 comparable update to the environmental reviews.

25 As I think you've also gotten a flavor from the first panel, this is a

1 very complex review. It has very many different technical areas within the
2 environmental review area, many different disciplines and I would just like to
3 acknowledge the very beneficial participation of a wide range of stakeholders,
4 some of whom were represented at the earlier panel. But far more stakeholders
5 than we could possibly have at a Commission meeting and they've all provided a
6 very valuable contribution to our update process.

7 As well as -- even though we have the Office of Nuclear Reactor
8 Regulation at the table today, we had a number of other offices. FSME, New
9 Reactors, OGC and the Office of Research all had very important roles in this
10 rulemaking. So we are on track to provide the final rule to the Commission on
11 May 1st, absent some direction to do something other than that. And so with that
12 I'm going to turn the presentation over to Eric to begin the discussion.

13 ERIC LEEDS: Thank you, Bill. Good afternoon, Chairman and
14 Commissioners. I'm going to echo one of Bill's themes that the NRC staff
15 continuously looks to improve our guidance and our regulations. We incorporate
16 Lessons Learned and knowledge gained from completed license renewal
17 environmental rules. We incorporate what we learn from operating experience
18 and as we identify new environmental or safety issues over time we incorporate
19 those changes into our license renewal reviews.

20 Now, from 1986 to 1996, the NRC set up its current regulatory
21 framework for license renewal environmental reviews, including our regulations
22 and our guidance. From 2000 to the present, the NRC has used this framework
23 to safely review 71 commercial nuclear power reactor licenses. Over 40 license
24 renewal environmental reviews have been conducted. Already, we have nine
25 units that have entered the period of extended operation and they're operating

1 safely beyond their initial 40 year license term. Throughout, the NRC has
2 maintained our focus on protecting people and the environment.

3 Now, as you just heard about the Generic Environmental Impact
4 Statement, it's intended to improve the efficiency of the license renewal
5 environmental review process. Generic issues are called Category 1, they're
6 addressed in the GEIS. Category 2 issues require a plant specific environmental
7 assessment. NRC staff conducts its own independent assessment of Category 2
8 issues in plant specific supplements to the Generic Environmental Impact
9 Statement. For every issue, the NRC staff also looks for new and significant
10 information that could change the Category 1 generic conclusions of the GEIS.
11 And through our review process, we do this by asking the public during our
12 scoping meetings and during our draft comment periods. So, with that, I'm going
13 to turn it over to Melanie and have Melanie Galloway get into more details.
14 Please.

15 MELANIE GALLOWAY: Thank you, Eric. Good afternoon,
16 Chairman and Commissioners. My name is Melanie Galloway and I'm the Acting
17 Director of the Division of License Renewal in the Office of Nuclear Reactor
18 Regulation. I am pleased to be here today to discuss the background and status
19 of the update to 10 CFR Part 51, the license renewal environmental regulations
20 and their associated technical basis, NUREG 1437, entitled the Generic
21 Environmental Impact Statement for License Renewal of Nuclear Plants. Andy
22 and I in our discussions will refer to that, as you know, as the GEIS. The topics I
23 will address today are noted on the slide above.

24 NEPA of 1969 requires that Federal agencies follow a systematic
25 approach in evaluating potential environmental impacts associated with certain

1 actions. In evaluating the renewal of a nuclear power plant license the NRC is
2 required to consider the impact of this proposed action. That means we need to
3 consider alternatives to license renewal, including replacement power
4 alternatives and we need to consider the impacts of the no action alternative, that
5 is, not renewing the license. We also need to consider alternatives available to
6 mitigate adverse environmental impacts. As Eric discussed earlier in the GEIS,
7 the NRC determined that certain environmental impacts associated with license
8 renewal were the same or similar for all plants and thus could be treated on a
9 generic basis. The GEIS assesses these issues and assigns an environmental
10 impact that applies to all plants.

11 Alternately, the GEIS also defines those issues that need to be
12 addressed on a plant specific basis. This differentiation allows and facilitates the
13 NRC's environmental review process by allowing the staff to apply its resources
14 more effectively. That is, the staff is able to focus on plant specific impacts that
15 have the potential for greater or different environmental impact than the generic
16 impacts.

17 This rulemaking seeks to update NRC's NEPA implementing
18 regulations -- we should be on slide nine, thank you -- seeks to update NRC's
19 NEPA implementing regulations in 10 CFR Part 51. Table B1 entitled Summary
20 of Findings on NEPA Issues for License Renewal of Nuclear Power Plants
21 summarizes the Commission's findings on the scope and magnitude of
22 environmental impacts of renewing the operating license for a nuclear power
23 plant as required by NEPA and is the basis for the final rule. In addition, other
24 license renewal provisions in 10 CFR Part 51 will also be amended including, for
25 instance, the content of a license renewal applicant's environmental report. This

1 rulemaking has three major objectives.

2 First is to incorporate lessons learned from over 40 license renewal
3 environmental reviews since 1996. For instance, new environmental issues such
4 as that that's already been discussed on radionuclides to groundwater has arisen
5 in these intervening years, and we have learned that certain assumptions in the
6 1996 GEIS did not materialize, such as refurbishment activities and the
7 environmental impacts from them.

8 Second, we have also sought to update the rule and the GEIS to
9 reflect changes to environmental laws. For instance, the Magnuson-Stevens
10 Fishery Conservation and Management Reauthorization Act of 2007 and
11 Executive Orders such as that dealing with environmental justice.

12 A third objective involves adding clarity to the GEIS. This too has
13 already been discussed. The '96 GEIS is organized by plant systems and
14 activities, such that a single impact needs to be looked at through several
15 locations in the GEIS. Instead, the revised GEIS organizes the assessment by
16 environmental resource, so that all impacts to that resource are addressed
17 together and Andy will provide an example of that in his talk. Concurrent with
18 this rulemaking the staff has also updated the associated Reg Guide which
19 provides a guidance to applicants on the contents of their applications, and also
20 has updated the environmental Standard Review Plan which provides guidance
21 to the staff on how to perform the license renewal environmental review. Next
22 slide.

23 On a 10 year cycle the Commission proposed to review the
24 material in table B1 and update it, if necessary. The NRC began the effort in this
25 update -- to update the '96 GEIS is June of 2003. We published a notice of intent

1 in the Federal Register and conducted public scoping meetings in all four of the
2 NRC's regions. The meetings were conducted to help identify significant issues
3 and to determine the scope of issues to be addressed in the GEIS update. This
4 public comment period ended in September of 2003. The project was then
5 inactive for the next two years due to staff resource limitations. In October of
6 2005 we reopened the public comment period and extended it until December of
7 2005 but received no additional comments. The preparation of the GEIS update
8 considered all relevant issues raised by members of the public, environmental
9 interest groups and representatives of local, state, Tribal and Federal
10 government agencies during the scoping process. The GEIS update addresses
11 all of the issues evaluated in the '96 GEIS along with any new information
12 identified as a result of this scoping. The staff then issued the proposed rule, the
13 revised GEIS and the revised guidance documents for public comment in July of
14 2009. Next slide.

15 To solicit public comments the NRC placed a copy of the proposed
16 rule and all the associated documents in the NRC's public electronic reading
17 room and on its license renewal website. The staff sent copies to members of
18 the public and environmental interest groups, representatives of American Indian
19 Tribes and Federal, state and local agencies. A notice of availability was also
20 published in the Federal Register. The staff issued public service
21 announcements and press releases to announce the availability of the proposed
22 rule and the draft GEIS, including public meetings and instructions on how to
23 comment. Again, we conducted a series of meetings in each of the four regions
24 and conducted a webinar at NRC headquarters to receive public comments on
25 the proposed rule and the draft revised GEIS. All meetings had open phone lines

1 to provide additional opportunities for public comment from anywhere in the
2 United States. The staff established several methods for receiving these
3 comments, including an email address and posting of the rule on regulations.gov.

4 In June of last year, the staff held a public meeting on
5 implementation of the rule and this was attended by many interested
6 stakeholders. Applicants at that time from the industry indicated that they
7 planned and were already starting to adopt proposed changes within their
8 environmental reports. Next slide.

9 In response to public request, the staff extended the comment
10 period on the proposed rule and the draft revised GEIS by additional 90 days
11 from the original 70 day comment period. During this public comment period, the
12 NRC received a large volume of comments from a wide variety of stakeholders in
13 letters, emails, web submissions and also during the public meetings. Next slide.

14 The EPA has given the GEIS its highest rating. Despite the
15 terminology, lack of objection is indeed their highest rating, and this rating means
16 that EPA's review did not identify any potential environmental impacts requiring
17 substantive changes. This rating from EPA echoes sentiment in the
18 Commission's voting record regarding the proposed rulemaking. In addition, the
19 NRC has received positive comments and feedback from the EPA and other
20 stakeholders on the improvements made in the GEIS revision regarding its
21 reorganization, its readability and the description of the license renewal
22 environmental review processes. By actions such as issuing the associated
23 guidance concurrent with the rule, this rulemaking meets the spirit of Executive
24 Order 13579 entitled "Regulation and Independent Regulatory Agencies" that
25 was issued by President Obama in July of 2011, and this then is consistent with

1 the Commission's SRM on cumulative effects. Next slide.

2 The staff conducted significant public outreach at all stages of rule
3 development. Hundreds of pages of public comments were received on the
4 proposed rule and the associated companion documents. The public interest in
5 this rulemaking was high, reflecting multiple perspectives which contributed to an
6 improved rule and guidance. Some additional commenters beyond those listed
7 on the slide, but still not representing a complete list include the Sierra Club, the
8 Bureau of Indian Affairs, EPA and other Federal and State agencies. Next slide.

9 The NRC considered all public comments gathered from public
10 meetings and the comment period when developing the final GEIS. Selected
11 major in-scope issues were identified on a variety of topics and I'm just going to
12 touch on a few.

13 Regarding radionuclides in groundwater: This new issue received
14 many comments. Several commenters expressed opposition, both to its
15 inclusion as a Category 2 issue and the staff's determination of small to moderate
16 impact. Arguments for changing the issue to Category 1 were based on
17 voluntary industry initiatives to protect groundwater. Despite these initiatives, the
18 staff believes that it needs adequate information in the applicant's environmental
19 reports to address the environmental questions and to determine the impacts on
20 a site specific basis.

21 Regarding the magnitude of the impact, the NRC bases its
22 determination of small to moderate on a review of existing plants with
23 radionuclide releases. As reflected in the draft final rule and GEIS, this issue
24 remains Category 2. With respect to human health impacts, many commenters
25 identified recent studies that claim an association between cancer risk and

1 proximity to nuclear power plants. These comments, in effect, take issue with the
2 NRC's regulatory limits for radiological protection, which are designed to protect
3 workers and the public from harmful effects of radiation. The staff maintains that
4 these limits are adequate for plant operations including for license renewal.

5 Comments on postulated accidents ranged from disagreement with
6 the GEIS revisions environmental impact conclusion from design basis accidents
7 and severe accidents to statements that the NRC's evaluation is not adequate
8 because of its use of probability weighted consequences. Commenters also
9 stated that the GEIS revision should evaluate the consequences of reactor
10 accidents, expand the evaluation to include spent fuel pool accidents and include
11 accidents due to age related plant component degradation. The staff presents
12 updated technical information in the revised GEIS and its conclusions related to
13 accidents remain unchanged from the 1996 GEIS. Next slide.

14 In addition, many comments were reviewed that are outside the
15 scope of the license renewal environmental review. Regarding seismicity, many
16 commenters stated that seismic issues should be included in the rule and pointed
17 out the importance of reassessing seismic conditions in determining the safety of
18 operating nuclear power plants. Industry commenters disagreed and argued that
19 seismology is an ongoing safety issue that is being addressed at all plants. The
20 staff maintains that the assessment of seismic hazards for existing nuclear power
21 plants is a separate and distinct process from license renewal reviews.

22 Also, seismic conditions are attributes of the geologic environment
23 that are not affected by continued plant operation and therefore are outside the
24 scope of this rule. Many commenters also expressed concern with emergency
25 preparedness, evacuation and safety and security, as we've already heard, at

1 these nuclear power plants. Commenters stated that these concerns should be
2 included in the scope of plant specific license renewal reviews. The staff
3 maintains that emergency preparedness and security are part of the plant's
4 current operating licensing basis and are addressed by the NRC on an ongoing
5 basis. Thus, they should not be examined at the license renewal stage.

6 With respect to the storage of spent nuclear fuel and waste
7 disposal, many commenters expressed concern about the increasing volume of
8 spent nuclear fuel at existing power plant sites and the availability of a geologic
9 repository for future waste disposal. The staff maintains that the environmental
10 impacts from the storage of spent nuclear fuel during the license renewal period
11 should be a Category 1 issue and that the associated environmental impacts will
12 be small for all plants. The long term storage of spent nuclear fuel beyond the
13 license renewal period is addressed by the waste confidence rule and is outside
14 the scope of license renewal.

15 Lastly, although no public comments were received related to the
16 Fukushima event because the public comment period on this rulemaking was
17 closed, we wanted to address how this issue relates to the revised rule. Any new
18 regulatory requirements resulting from NRC's Fukushima follow up actions will be
19 implemented as part of a safety review associated with the plant's current
20 licensing basis regardless of whether it is operating in its renewal period or not.
21 If a plant's severe accident analyses changes for any reason, then those
22 changes will be evaluated in our license renewal environmental review as
23 appropriate. Therefore, the Fukushima accident does not need to be explicitly
24 addressed in the GEIS. Thank you Chairman and Commissioners, this
25 concludes my presentation and I'd now like to turn it over to Andy Imboden who

1 will talk about significant changes.

2 ANDREW IMBODEN: Thank you Melanie and good afternoon
3 Chairman and Commissioners. My name is Andy Imboden, I'm the Branch Chief
4 of the Environmental Review and Guidance Update Branch in the Division of
5 License Renewal in the Office of Nuclear Reactor Regulation. My presentation
6 will explain the staff's proposed changes to our environmental protection
7 regulations concerning license renewal. The final rulemaking package, final
8 generic environmental impact statement revision and other associated guidance
9 documents are due to the Commission in May. Because this rule is not currently
10 before the Commission, I will share the staff's overall perspective, the key
11 concepts we've kept in mind throughout the project. I will then share a summary
12 of changes to the rule, not to be exhaustive, but to highlight the most notable
13 ones, and I'll touch briefly on some information you've probably already heard
14 from the first panel on specific issues, including the new issues that -- because
15 those naturally come up as questions.

16 And finally, as we approach the date the final rule will be sent to the
17 Commission, the staff has done some thinking about how the rule will be
18 implemented, so wanted to share the staff's perspective on implementation, then
19 we'll wrap up.

20 The NRC assesses the environmental impacts of our actions, such
21 as the Generic Environmental Impact Statement, in order to comply with NEPA.
22 NEPA requires the NRC to assess on all of our licensing actions prior to taking
23 those actions. The environmental regulations in Part 51 take a graded approach
24 by using categorical exclusions, environmental assessments or environmental
25 impact statements, depending on the licensing action and the possible severity of

1 environmental impact for that action. Of course, the most thorough analysis is in
2 the Environmental Impact Statement and that is required for license renewal.
3 Throughout the process, the staff was very careful to ensure that the GEIS and
4 the GEIS process fully conformed to the Commission's regulations for
5 Environmental Impact Statements.

6 One key concept that the staff was guided by throughout the project
7 is that environmental issues in the revised GEIS are arranged by resource area.
8 As you heard before, this perspective is a significant change from the 1996
9 GEIS, in which the environmental issues were arranged by either power plant
10 systems, such as the cooling systems, the transmission lines, or activities,
11 normal operations or refurbishment. As before, the environmental impact to
12 license renewal activities, including plant operations and replacement power --
13 sorry -- maintenance and refurbishment activities along with replacement power
14 alternatives are addressed in each resource area. We no longer make the
15 distinction, as we used to, between activities performed as part of normal
16 operations and activities performed as part of refurbishment.

17 We now simply discuss those impacts to the resource all at once.
18 We've heard good feedback from others and it was good to hear from the first
19 panel commenters that they appreciated this approach. So, throughout the
20 project we've kept that perspective and we also believe that from the staff's
21 perspective, this will result in a more efficient review process.

22 The other key concept the staff carried throughout the project was
23 that it was appropriate to divide the environmental impacts into two categories,
24 either generic or site -- either a generic approach or a site specific review. This
25 provides structure and organization to the assessment and whether an impact is

1 Category 1 or 2 could be due to the plant itself or the environment around the
2 plant. For example, the noise impacts of relicensing are the same from plant to
3 plant, the plant will sound the same as it did during the current operating, and so
4 therefore that would be a good Category 1 issue. By contrast, a particular
5 endangered species varied between plants. The American crocodiles at Turkey
6 Point -- or at Turkey Point, they're not at Prairie Island in Minnesota, so that was
7 an appropriate Category 2 issue.

8 First of all, it's important to be clear on the point that the staff was
9 very careful not to eliminate any issue that's in the 1996 GEIS. However, as a
10 result of our review and update during this project we thought that reorganization
11 would be beneficial, so in the final rule we have a reorganized list of 78
12 environmental issues, it was 92, and in the proposed rule and in the proposed
13 final rule language that we released in December in preparation for this meeting
14 we say that there are 17 issues that need a plant -- a site specific review. That
15 number was higher.

16 The issues that were dealt with individually in the 1996 GEIS that
17 were similar and related, were grouped under broader, more encompassing and
18 complete and comprehensive issue. For example, the 1996 GEIS contains three
19 aesthetic impact issues. In this revision, all have been combined into one
20 aesthetic impact issues. This clearly streamlines the review process and makes
21 the environmental impacts clearer to the reader.

22 Several new Category 1 and 2 issues have been added to the
23 revised GEIS that were not evaluated in the 1996 GEIS. In the interest of time I'll
24 highlight a few selective items. Exposure of organisms to radionuclides has been
25 an issue of interest from the public, Environmental Protection Agency and other

1 government agencies. In particular, our site specific environmental impact
2 statements for license renewal have received many comments on this area. It is
3 important to note that we're not making a judgment on standard for
4 environmental protection, but consistent with their obligations under NEPA, we're
5 disclosing with the environmental impacts to aquatic and terrestrial biota would
6 be, and consistent under NEPA, various communities have raised concerns
7 about the doses received by the biota themselves, in addition to the doses
8 received by predators who would consume various smaller organisms over the
9 period of license renewal. The staff has concluded that after performing many of
10 these environmental reviews, including analysis performed for the GEIS itself,
11 that there's enough evidence for us to address this issue generically and the
12 doses to biota have consistently been within permissible levels and often not
13 detectable.

14 Geology and soils is another area that the staff has proposed as a
15 new Category 1 issue. For the purposes of license renewal, we know the plant
16 has obviously already been sited, those decisions have been made and license
17 renewal will not change that. However, consistent with NEPA, staff must discuss
18 the affected environment, the setting around the plant, and we believe that this
19 discussion would be improved with the discussion of geology and soils.

20 Radionuclides released to groundwater we already heard about in the first panel.
21 It's a new issue for which the staff is proposing a site-specific review is needed.
22 This issue is not in the 1996 GEIS, however, for the past five years or so, the
23 staff has received many comments on this issue, from members of public as well
24 as other commenting state and Federal agencies. In a NEPA context,
25 radionuclides in groundwater as projected over the period of extended operation

1 and their impact to the groundwater resource, makes radionuclides and
2 groundwater an issue that is appropriately discussed in an Environmental Impact
3 Statement. And given the various sources of radionuclides, such as from the
4 spent fuel pool, buried pipe, et cetera, unique hydrological feature for each plant,
5 the staff concluded that a site-specific review is required.

6 Environmental justice is also a newly categorized issue. It was not
7 analyzed in the 1996 GEIS and it will be in this revision, a new one needing a
8 site-specific review.

9 It is important from the staff's perspective that if we are going to
10 agree that a site-specific issue can be addressed generically, it needs to be well-
11 supported. Based on Lessons Learned and knowledge gained from previous
12 license renewal environmental reviews, some issues were re-categorized from
13 Category 2 to Category 1. No issues were identified to go the other direction,
14 from a generic issue to a site-specific one. I also make the note that even though
15 these Category 2 issues are being proposed for re-categorization to Category 1,
16 the staff continues to evaluate on every site-specific review for new and
17 significant information concerning these issues. Air quality, housing, public
18 services and off-site land use are examples of issues that were re-categorized
19 from Category 2 to Category 1. The 1996 GEIS explains that these issues were
20 Category 2, needing a site-specific review, based in large part on postulated
21 refurbishment activities. The previous 40 in plant-specific environmental reviews
22 conducted by NRC since then have shown no substantial increases in the
23 number of nuclear power plant workers during the license renewal term and that
24 refurbishment activity such as steam generator replacement and vessel head
25 replacement have not required the large number of workers and the months of

1 time that was conservatively estimated in the 1996 GEIS. And also as explained
2 in the GEIS, these activities have taken place during the current operating
3 license term at a number of plants and impacts have been accounted for in
4 annual site evaluation reports, environmental operating reports and radiological
5 environmental monitoring program reports. These activities have been
6 conducted for economic, reliability or efficiency reasons during refueling or
7 maintenance outages, and very few applications have identified any
8 refurbishment activities specifically associated with license renewal. That is why
9 many of these issues were re-categorized.

10 The other major re-categorized issue was groundwater and soil
11 contamination. As a result of our research-based approach, we had combined
12 several groundwater and soil contamination issues into one Category 2 issue in
13 the proposed rule. This inadvertently had taken some Category 1 issues and
14 made them Category 2. We're planning on restoring this in the final rule for May
15 and that was reflected in the final rule language that we released in December.

16 The staff is on track to deliver the rulemaking package with the final
17 GEIS and all guidance documents to the Commission on May 1st. As we
18 conducted our public meetings on the draft GEIS and in other settings such as
19 the RIC, we began to hear from stakeholders about the rule's implementation.
20 So in June of last year, the staff reached out to all stakeholders and held a public
21 meeting specifically to gather input on the rule's implementation. We are
22 concerned about making the rule effective too soon without enough time to
23 prepare for the changes. In the May SECY Paper, staff will maybe a
24 recommendation of the implementation of the rule because although nothing of
25 this rule would require any analysis that was not asked for in the proposed rule,

1 the decision about the implementation date will have implications for agency
2 resources, implications for when license renewal applications might be
3 submitted, but also, we believe that this rule improve the efficiency of the review
4 in the long run, all factors we believe are appropriate to consider for
5 implementation.

6 So to wrap up, I'd like to thank the Commission for holding this very
7 important meeting to hear different perspectives on this complex matter. Several
8 NRC offices have supported that effort involving many specialized areas of
9 expertise. I'd also like to leave with the awareness that the reorganized GEIS,
10 from system based to an environmental resource based approach, makes it
11 easier for readers to understand license renewal issues that could impact the
12 environment, and by consolidating issues based on lessons learned and
13 knowledge gained from completed environmental reviews. The license renewal
14 environmental review process is helped by focusing these plant-specific reviews
15 and by use of the new GEIS.

16 The final point I'd like to make regards the significant public
17 involvement associated with this rulemaking. We've had many public meetings,
18 hundreds of days where the documents were out for public comment and we
19 received thousands of very good, substantial and well articulated comments from
20 our stakeholders throughout the process. I thank the Commission for holding this
21 meeting and I welcome questions. Thank you.

22 BILL BORCHARDT: Thank you. The staff's complete.

23 CHAIRMAN JACZKO: Thank you. I'll start with Commissioner
24 Magwood.

25 COMMISSIONER MAGWOOD: Thank you for your comments

1 today and also thank you for the work that went into this. I imagine some of you
2 have been involved in this for more than a short period of time and it's a very
3 complicated piece of work. And I appreciate the effort and the diligence by which
4 you pursued it, and I think you've created a pretty good product. Since we heard
5 complaints from the industry and complaints for the state and complaints from
6 the NGO, I think you've got everyone unhappy so you must have done something
7 right, I guess.

8 A couple of things. You know, one of the issues that came up a lot
9 in the first panel, and I think that -- I think that Andy alluded to it a bit -- is this
10 issue about what's in and what's out of consideration. And I don't think we have
11 to go over much of the -- obviously spent fuel was one that people worry about,
12 the seismic, there's others. But there's one that came up in the comments from
13 San Luis Obispo Mothers for Peace that has come up in other conversations. I
14 want to give you a chance to react to this and ask this issue about the
15 maintenance and personnel and mechanical history of a plant, and how that
16 might have some bearing on the analysis of the plant going forward as it's being
17 considered -- you know, this place, both the safety perspective, also
18 environmental perspective. Because if you make a claim, for example, that the
19 plant has had a long history of -- and I'm not pointing at any plant, just talking
20 theoretically here -- the plant has a long history of maintenance issues or has a
21 long history of releases that have been problematic. Is that something that ought
22 to be considered in this review that obviously should be considered as a plant's
23 environmental performance is looked at in a renewed time frame. I want to know
24 how the staff thought about that issue.

25 MELANIE GALLOWAY: Let me take a stab at it. To the extent that

1 there would be releases, for instance, over time, when it comes time to evaluate
2 environmental issues in license renewal space, we do take a look at the plant's
3 history, in terms of those releases, and we consider that, then, in our
4 environmental assessment. When it comes to looking at mechanical issues and
5 failures of equipment, to the extent that that's already encompassed by the
6 accident analysis that is done for the plant, as long as it would remain bounded
7 by that, we would be in a situation of having the design basis accident piece
8 already covered, also, as part of the license renewal environmental review.

9 COMMISSIONER MAGWOOD: So insofar as it's a Category 2
10 item, you do consider the history?

11 MELANIE GALLOWAY: Well, the design basis accident piece is a
12 Category 1-

13 COMMISSIONER MAGWOOD: -- the releases?

14 MELANIE GALLOWAY: Yeah, the releases -- yes. Yes -- and
15 even if it were Category 1, to the extent that there is unique information or some
16 information that is beyond what is described in the GEIS that makes it a Category
17 1, we would consider that as well.

18 COMMISSIONER MAGWOOD: Okay.

19 ANDREW IMBODEN: Just add a little bit more to that. Issues like
20 that are very often brought up by members of the public during the scoping
21 period, but also when the staff visits the site as part of the license renewal
22 process, we examine records like that. Precisely.

23 COMMISSIONER MAGWOOD: Bill, did you have a comment?
24 Another issue that came up in -- in fact, I think Riverkeeper mentioned this in
25 their comments today -- what the staff's criteria is for new and significant

1 information. I want to give you a chance to comment on that.

2 ANDREW IMBODEN: Okay. There's no disagreement on what's
3 new. The judgment is in what's significant. Since the 1996 GEIS, the staff
4 assesses significance. We've binned it into one of three things: small, moderate
5 or large. So we have a three level standard of significance and if information
6 would cause us to change that level of significance that would clearly be
7 something new and significant. Just for reference benefit, the small would be
8 environmental impacts are not detectable or are so minor that they would not
9 destabilize or noticeably alter any important aspect of the resource. Moderate
10 would be, then, the environmental impacts are sufficient to alter noticeably but
11 not destabilize important attributes of the resource. And large would be that
12 destabilization.

13 COMMISSIONER MAGWOOD: Well, one last question for you and
14 this is something I talked to the first panel about a bit, and that is the issue of
15 unplanned releases. The -- there were several interveners or NGO groups that
16 had the comment that the GEIS is deficient because it doesn't take into account
17 these future unplanned releases, and I struggle with this because I don't know
18 how you go about estimating that and I wonder if you have some thoughts about
19 that. Is this something that was -- I'm sure this came up during the public
20 discussions. I'd just appreciate your thoughts.

21 MELANIE GALLOWAY: Yeah. When it comes to unplanned
22 releases, we make the assumption in environmental space that the plant is going
23 to be operating appropriately and that when there are unplanned releases that
24 the utility is going to have plans in place to address them. And so we would look
25 at the assurance that those plans are there to minimize and mitigate the impacts

1 of those unplanned releases. Again, where there have been a history of
2 unplanned releases at a plant, that would be factored into our environmental
3 review associated with license renewal going forward.

4 COMMISSIONER MAGWOOD: Okay. Appreciate that. All right.
5 That's all I have. Thank you very much.

6 CHAIRMAN JACZKO: Commissioner Ostendorff.

7 COMMISSIONER OSTENDORFF: Thank you, Mr. Chairman.
8 Thank you all for your presentations. I think at the first panel I asked a question
9 about providing some examples of benefits or improvements of the current rule
10 compared to the 1996 version and I think we heard a fairly good sampling of
11 improvements in where you and your team have made things better. So thank
12 you for what you've done to --

13 MELANIE GALLOWAY: Okay, thank you.

14 COMMISSIONER OSTENDORFF: -- get us to this stage. I wanted
15 to, Melanie, start out with you for a couple questions and I'm going to kind of look
16 at your Slides 12 and 16. You comment in Slide 12, "A large volume of
17 comments," and I realize there's a question about the comment period and when
18 it closed and --

19 MELANIE GALLOWAY: [affirmative].

20 COMMISSIONER OSTENDORFF: -- some discussion earlier
21 about whether it should be reopened or so forth. But, I guess, were you
22 surprised, when the comment period was opened, to receive this volume of
23 comments? Anything that struck you as, "Wow, I had not anticipated this"?

24 MELANIE GALLOWAY: Yeah, I don't think so. I think we've known
25 all along the interest in this rule and the guidance document associated with it is

1 very high and it covers the whole spectrum of any interest in license renewal. So
2 I don't think we really did but, still, the number -- the 1,000 pages of comments
3 that we got, it still is overwhelming, you know? And because the different
4 comments -- they're all written a little bit differently and they all cover sometimes
5 multiple subjects. It's difficult to bin them and that's where a lot of our challenge
6 came in as far as how to initiate the review and how really to assure that we're,
7 you know, accommodating them appropriately. Do you want to add anything?

8 ANDREW IMBODEN: Just that , thank our stakeholders for the time they
9 put into these because everyone is concerned about the plant in their backyard
10 but we got these comments and they truly were on the generic approach, so that
11 was a little surprising to me, that there were -- so many were just on scope and
12 so sophisticated.

13 COMMISSIONER OSTENDORFF: So many were what? I'm sorry.

14 ANDREW IMBODEN: Were right in scope --

15 COMMISSIONER OSTENDORFF: Okay.

16 ANDREW IMBODEN: -- and, you know, very good questions.

17 COMMISSIONER OSTENDORFF: Okay. So let me turn to your
18 Slide 16 and some of these issues that are out of scope, and this again on the
19 theme as to how we as an agency communicate.

20 MELANIE GALLOWAY: [affirmative].

21 COMMISSIONER OSTENDORFF: And I acknowledge Andy's use
22 of the phrase "complex rulemaking" on one of your later slides. You know, we
23 had different requirements and regulation orders to deal with security issues, we
24 have a waste confidence rulemaking in place, we're dealing with, you know, GI-
25 199, GI-204, fill in the blank, all of the different things that Bill and Eric are

1 working on across the whole agency. And so when I think about that I go back to
2 your Slide 16 about these out of scope issues, and I wanted to maybe just focus
3 in -- I'll use EP perhaps as being the one I'll ask this question about. I'm trying to
4 get a better understanding as to -- you know, I realize you probably received
5 comments -- we heard this in the first panel, some discussion about EP perhaps
6 being a topic that would be appropriate to consider during the license renewal
7 process. Different positions on that.

8 MELANIE GALLOWAY: Yeah.

9 COMMISSIONER OSTENDORFF: I'm trying to discern, is that
10 because of dissatisfaction or -- with our current EP process, with the belief that
11 our current EP process, the rule that's being implemented now, that those are
12 inadequate or is there some other concern there? I'm just trying to understand --
13 again, if you look at the holistic spectrum of all NRC regulations, is there some
14 fundamental weakness in our EP rules that should be suggested by this being
15 raised or is it rather just a belief that with license renewal that's the time, because
16 of the population change issues that were previously discussed? I'd be
17 interested in any thoughts on that. It's not a very --

18 MELANIE GALLOWAY: Yeah.

19 COMMISSIONER OSTENDORFF: -- focused question but I think
20 you get the sense.

21 MELANIE GALLOWAY: Yeah. I think emergency preparedness is
22 in the same group as a number of other issues in license renewal, whether it's
23 safety or whether it's environmental, that there's a thinking that there's value in
24 reconsidering any number of things for which the Commission has already made
25 a determination previously. And so, you know, and that -- from that sense, it's

1 common. You know, I think the one point I would like to make on emergency
2 preparedness is that when it comes to responding and evacuating, that's in
3 response to a severe accident. And in the GEIS, sever accidents have been
4 determined to have small impact. So I think, too, a point that wasn't made is that
5 when we look at the evacuation question, because the impact has already been
6 determined from a severe accident to be small, the evacuation -- the probability
7 of it occurring would make it most likely a small impact as well. And so, you
8 know, from that standpoint EP might be a little bit different than some of these
9 other things but it's all in the same box of things that should be relooked at at the
10 time of license renewal.

11 COMMISSIONER OSTENDORFF: Well if I can just hone in on that
12 just a bit. Is it your sense that the public commenters, at large, agree or disagree
13 with the characterization that the accident would be of small impact?

14 MELANIE GALLOWAY: Well it depends, I guess, which
15 commenter you are. You know, I would think those in the industry would tend to
16 agree with that. Those that represent the public might not.

17 COMMISSIONER OSTENDORFF: Okay. Andy did you want to
18 add anything to any of that?

19 ANDREW IMBODEN: Just the notion that issues that are out of
20 scope. When you get a public comment up, you would say, "This issue's out of
21 scope: period." And, you know, the staff has, you know, throughout this process
22 and throughout the years of license renewal and receiving all these, you know,
23 comments on each site specific review, you know, we've labored to put more
24 there for the, you know, "This is out of scope why?" You know, and provide more
25 explanation to people making comments that are out of scope. You know, try to

1 get at that issue. And also on the GEIS itself, since the end of the comment
2 period we've been working on -- you know, we've seen the written comments.
3 "This area's not clear" or "that area's not clear." We've been working on that and
4 hopefully when in May the product that the Commission will, you know, be
5 clearer in those areas.

6 COMMISSIONER OSTENDORFF: Okay. Bill, did you or Eric want
7 to --

8 BILL BORCHARDT: Yeah, Commissioner. Just want to step back
9 for one second, take a little longer view. There's a subset of stakeholders that I
10 think have some issue with the entire philosophy of license renewal, in that they
11 would prefer an approach that was a complete new relicensing, a re-baselining of
12 design bases and environmental standards and so the basic approach that we've
13 decided on as an agency years ago I think still raises some disagreement and
14 you see some particular comments that really go back to that fundamental
15 approach.

16 COMMISSIONER OSTENDORFF: Okay, now using that as just
17 maybe the foundation for a last question for any of you. I'll start out with Melanie
18 and then others that want to add in. Are there any -- kind of given where we are
19 with respect to spent fuel issues, Fukushima, North Anna seismic event, a lot of
20 things have happened in the last year. Is there any -- when you integrate those
21 events with some concerns you've heard from the previous panel and with where
22 your proposed rule is at this stage and your interface with the public, are there
23 any areas where you think we need to improve in our ability as an agency to
24 communicate on these issues to the public?

25 MELANIE GALLOWAY: Well I think there's always an opportunity

1 to continue to improve and work on our communication, ensure that what we're
2 putting forth is clear. And I know that on this rulemaking we've been working
3 very hard to do that through the public interactions that we've had, the number of
4 public meetings, the opportunities, the different ways we've been seeking
5 comments to come in. And as Andy mentioned, we've worked very hard to have
6 complete answers in order to be able to explain our rationale and our thinking.
7 But is that enough? I don't know. You know, we just need to keep working at it.

8 BILL BORCHARDT: And I just can't pass up the opportunity --

9 COMMISSIONER OSTENDORFF: Please.

10 BILL BORCHARDT: -- and I know that you know this but we're
11 going to implement some new requirements coming out of Fukushima. There's
12 little doubt of that. We don't need the license renewal process, we don't need
13 any marker in time to enable us to impose new requirements on a licensee,
14 regardless of where they are in this process or any other process. So I think
15 sometimes that gets lost and the idea of waiting until there's some point where
16 there's no -- it's stagnant. There's no changes being made to any requirements
17 that point in time will never occur. So, I mean, I think we're of the view -- I'm of
18 the view that we've done a lot of work, let's make these changes. It won't stop us
19 from imposing new requirements or doing what's right or considering a site
20 specific review issue as part of the renewal process.

21 COMMISSIONER OSTENDORFF: Thanks, Bill. Eric, did you want
22 to...

23 ERIC LEEDS: I can't resist. I was just going to jump on Bill's
24 bandwagon. Safety is not a stagnant endpoint. Safety is a process. We
25 continually learn. Technology keeps advancing. We take what we learn from

1 that, we apply to these plants, we make them safer. We're not going to wait for a
2 license renewal to have everyone review their seismicity. We don't wait for
3 license renewal for people to practice emergency preparedness and for us to
4 inspect to make sure that it works. We continuously go after those issues over
5 the course of the plant's lifetime. It's a process.

6 COMMISSIONER OSTENDORFF: Thank you. Thank you, Mr.
7 Chairman.

8 CHAIRMAN JACZKO: Commissioner Svinicki.

9 COMMISSIONER SVINICKI: Well, I wanted to add my thanks for
10 all the hard work you've done. Andrew and Melanie, if I might ask you, have
11 either or both of you been assigned to this update since 2003 or -- do you have
12 fewer years with it than that?

13 MELANIE GALLOWAY: I have fewer years.

14 COMMISSIONER SVINICKI: Okay. Andrew?

15 ANDREW IMBODEN: Yeah, I joined the NRC in 2004.

16 COMMISSIONER SVINICKI: Okay. Okay.

17 [laughter]

18 COMMISSIONER SVINICKI: Because I was sitting here and
19 thinking as there was discussion about reopening comment periods and things
20 like that, I thought of all the people in the room. You, too, must be thinking, "Oh
21 joy," you know, because it was already -- there was a period in time that this
22 update was inactive but maybe you weren't assigned to it at that time. I was just
23 going to make a comment along the lines, and I think Mr. Borchardt has kind of
24 addressed this, which is that anything with the complexity of this EIS which is
25 attempting to address generically something from a lot of different nuclear power

1 plants across the country, that's a big undertaking in and of itself. You add to
2 that the fact that it's been deemed that it's appropriate to revisit it and update it
3 on some frequency or periodicity. I was sitting here thinking, again, what Bill had
4 said, which is that what is that moment in time? I wasn't even looking for it to be
5 static. It's a bit of a threshold question of saying should I keep it open for just a
6 few more things to be explored? I drew a parallel as I was listening to the first
7 panel and to your presentations to something that I think the Commission had in
8 front of it very recently, which was after the events in Japan we were near to
9 finalizing the EP rule itself and that had been underway I think for five years,
10 perhaps a little bit longer. And, you know, I'll characterize my understanding of
11 the Commission's decision. There was let's at least put in place these beneficial
12 things and improvements that we've gotten to. Sure, none of this was developed
13 in light of recent events but still it is something that it was appropriate to move
14 forward and then frankly get up the next morning and begin looking at new EP-
15 related questions coming out of Japan, so I -- maybe I'll just ask, since Eric and
16 Bill you had some comment, do you think that there's some parallel to be drawn
17 here with that decision?

18 BILL BORCHARDT: Yeah, I think there's a strong parallel. I see
19 great benefit to getting this in place.

20 ERIC LEEDS: Agreed.

21 COMMISSIONER SVINICKI: Okay, thank you. And again, thank
22 you all for your work -- even from 2004. You've been at this for a while. Thank
23 you very much for what you're doing. Thank you, Mr. Chairman.

24 MELANIE GALLOWAY: Thank you.

25 CHAIRMAN JACZKO: Commissioner Apostolakis.

1 COMMISSIONER APOSTOLAKIS: Thank you, Mr. Chairman. I
2 don't remember if you gave an answer to this, but there was a request to extend
3 the comment period.

4 MELANIE GALLOWAY: Oh.

5 COMMISSIONER APOSTOLAKIS: Are you against it? Would you
6 consider it?

7 MELANIE GALLOWAY: Along the lines of what Bill just mentioned,
8 I think we see the stage of where we are now, there being greater benefit to
9 going ahead and finalizing the rule. It's worth noting that after the 1996 GEIS, a
10 couple of years later there was a supplement. So, in addition to a 10 year
11 periodicity of updating the GEIS there's also opportunity, should the agency
12 deem it appropriate, to supplement something that has already gone out.

13 COMMISSIONER APOSTOLAKIS: Okay. You raised the issue of
14 what's within scope, what's out of scope.

15 MELANIE GALLOWAY: [affirmative].

16 COMMISSIONER APOSTOLAKIS: And maybe I'm confused but I
17 appreciate that emergency planning is out of scope.

18 MELANIE GALLOWAY: [affirmative].

19 COMMISSIONER APOSTOLAKIS: But the gentleman from
20 Connecticut said that by evacuating people you create burden on natural
21 resources, that may be not enough and so on. So that's an environmental
22 impact. And what he suggested was because of that you go back to the EP and
23 you change it. So now I have an environmental impact and I have a proposal to
24 change the EP. Is that within or without the scope? I can argue that because the
25 water resources are impacted, it's within the scope, but then if I have to change

1 the EP maybe it's outside. I -- what do you think?

2 MELANIE GALLOWAY: I think the NRC's position right now is that
3 that would be in the category of out of scope, because it's part of emergency
4 preparedness and emergency planning, and that right now is not something we
5 are looking at within the environmental review associated with license renewal.

6 COMMISSIONER APOSTOLAKIS: But it does have an impact on
7 natural resources. So, I guess you have to take a position and that's a position to
8 take. And there will be another opportunity then to address these issues in
9 another forum? Is that what you're arguing? That we don't have to do it now, but
10 we are not saying, you know, you're wrong. We're saying, we will consider this
11 another time? Is that what it is?

12 MELANIE GALLOWAY: I don't think right now we're at the point
13 where we'd say that environmental planning should be within the scope of license
14 renewal in the environmental review. That would not --

15 COMMISSIONER APOSTOLAKIS: No, I understand that, but is
16 there another forum, completely different, where the issue can be addressed?

17 BILL BORCHARDT: Yeah, I think we're going to have to get back
18 to you. In all honesty, that was an interesting new topic of discussion from
19 Connecticut.

20 COMMISSIONER APOSTOLAKIS: Okay, that's fine.

21 BILL BORCHARDT: I'm not really familiar. We need some EP
22 experts to get a good -- better understanding of what the review areas are when
23 we become aware of that kind of an impact.

24 COMMISSIONER APOSTOLAKIS: Fair enough. So you're going
25 to send us a little note? Is that what you mean? Thank you. That's it.

1 CHAIRMAN JACZKO: Yeah, it's an interesting one and I think -- I
2 would be interested to see what the staff says. It was kind of a novel approach of
3 course. It kind of all gets mooted by the low probability and I think, you know,
4 Melanie, and Andy, I'm not sure which of you said, I think Melanie you said that.
5 I'm going to put you on the spot here, Andy, and I'm going to make you read the
6 definition of "small" again.

7 ANDREW IMBODEN: Okay, I'm glad I brought this. "Small" is
8 environmental impacts that are not detectable or are so minor that they will
9 neither destabilize nor noticeably alter any important attribute of the resource.

10 CHAIRMAN JACZKO: And I think that's where -- except for severe
11 accidents, because for severe accidents that's not why it's small. All right? For
12 severe accidents it's considered small because it's a low probability, so we don't
13 necessarily think it's likely that it's going to happen, but if it happens, the
14 consequences could actually be, you know, moderate, large, whatever. I mean,
15 depending -- small, moderate or large depends on the accident. So I mean I
16 know Commissioner Ostendorff likes to ask about the communications. That's
17 one where I don't think we do a great job communicating. I mean, because in
18 that context, "small" -- for severe accidents, "small" means something very, very
19 different. It means low probability. You know, which is one of the difficult things
20 with NEPA because we're dealing with something there that, you know, unlike a,
21 you know, a noise we know, if you have a -- in the turbine hall we know -- we
22 know what the noises of the turbines are going to be. We know what equipment
23 noises -- we can determine those, we can determine what they are and then we
24 can see and then we can kind of figure out what the impacts will be. Severe
25 accidents are a potential occurrence. We don't know until it gets hard into NEPA.

1 So, you know, I can appreciate that so, you know, it's kind of the catch-all with all
2 the things dealing with severe accidents is that it becomes small because you
3 don't think it's going to happen. I can't say the more I hear of this that I'm
4 comfortable with that. The more I hear it I think I don't think that's the right
5 approach. I mean, I think the practical reality is that we should be honest about
6 what the consequences are and, you know, again it is -- we are dealing in the
7 environmental space, so our ability here is not regulatory requirements that we're
8 putting in place, but I think it would be much more straight forward if we were
9 actually communicating severe accidents in the actual way in terms of what their
10 consequences were, which would bring in then, more naturally, I think this
11 discussion about what are the environmental impacts of an evacuation. So, it's
12 probably one of the most confusing things I think about the EIS and the -- it's not
13 restricted, of course, to this GEIS or to how we do it. I mean, the good part about
14 it is we do it consistently in all our EISs.

15 So in that vein, and I want just to highlight, I know that severe
16 accidents are generally site-specific. To what extent, I mean, when we look at
17 the site-specific analysis, to what extent is the site-specific analysis, the severe
18 accident analysis, is that most of what is really in the site-specific or there are
19 other things that get addressed?

20 ANDREW IMBODEN: Well, in the site-specific reviews, the staff --
21 well, the applicants bring us in and the staff assesses the severe accident
22 mitigation alternatives, how the severe accidents would be mitigated and then
23 are the costs beneficial or not? And all of that is discussed in the site-specific
24 reviews, because it is, you know, very dependent on which site and how you
25 mitigate those.

1 CHAIRMAN JACZKO: And, again, we're dealing with this in NEPA
2 space and we're not in -- this is not a licensing review piece. To what extent, you
3 know, we ultimately have no authority then. I mean, we're not -- these mitigating
4 measures are not things that we have authority to implement, maybe in some
5 cases we put license conditions on, I don't know. But in general there are things
6 that come about as part of the analysis. Do we keep track then of what they do
7 for mitigation measures or anything that comes out of the same analysis? I
8 mean, do we track that in any way? Does it become a commitment or does it get
9 any kind of tracking?

10 MELANIE GALLOWAY: No, no we don't.

11 ANDREW IMBODEN: And to explain that a little bit further is
12 sometimes, and we're seeing this in Columbia's environmental review, the
13 applicant goes through this process, identifies something and does it by the time
14 we finish our review.

15 CHAIRMAN JACZKO: [affirmative]

16 ANDREW IMBODEN: So there's that.

17 CHAIRMAN JACZKO: But it's not -- I mean it's not captured other
18 than maybe being referenced in the EIS.

19 ANDREW IMBODEN: Well, and if there is anything that then needs
20 to be done --

21 CHAIRMAN JACZKO: Yeah.

22 ANDREW IMBODEN: The staff would have a process for, you
23 know, making sure it goes through the backfit as appropriate and those kinds of
24 things.

25 CHAIRMAN JACZKO: Yeah.

1 ANDREW IMBODEN: But that then becomes not a license renewal
2 issue, that becomes an operating issue.

3 CHAIRMAN JACZKO: And by needs to be done, what does that
4 mean?

5 MELANIE GALLOWAY: In license renewal space, when we look at
6 the SAMAs --

7 CHAIRMAN JACZKO: [affirmative]

8 MELANIE GALLOWAY: If there is mitigation that involves aging,
9 that would be something that we would expect the applicant to do and that is
10 something that we would keep track of.

11 CHAIRMAN JACZKO: So it gets captured on a license condition
12 then on the safety side or --

13 MELANIE GALLOWAY: We have just come up with our first one --

14 CHAIRMAN JACZKO: Yeah.

15 MELANIE GALLOWAY: And that is on a review that is ongoing.
16 So we're not at the point yet where we've gotten to completing the safety
17 evaluation or where we've gotten to the point of developing a license. So --

18 CHAIRMAN JACZKO: You're making everybody over there
19 nervous.

20 MELANIE GALLOWAY: No, I doubt that.

21 CHAIRMAN JACZKO: Okay, good. That's okay.

22 MELANIE GALLOWAY: No. So, you know, determining what the
23 applicant is going to do and what stage they will be in -- if they've completed it by
24 the time we've finished our SE in the license, there's nothing more to do.

25 CHAIRMAN JACZKO: Right.

1 MELANIE GALLOWAY: So, we just need to see how the timing
2 and how the --

3 CHAIRMAN JACZKO: Do they -- by completed you mean that they
4 captured it in the SE and they're --

5 MELANIE GALLOWAY: I'm saying that they implemented it.

6 CHAIRMAN JACZKO: Okay. But again, there's no -- I mean, it
7 doesn't get captured in the safety evaluation.

8 MELANIE GALLOWAY: Oh, yes.

9 CHAIRMAN JACZKO: Oh, okay. I'm sorry. So --

10 MELANIE GALLOWAY: We would definitely discuss it in the safety
11 evaluation.

12 CHAIRMAN JACZKO: So they would then have a binding
13 commitment for -- through their license renewal?

14 MELANIE GALLOWAY: Well, again, it depends. You know, the
15 applicants do have commitments indicating what they are going to do. If it's a
16 modification or a change to a procedure for instance, that they will already have
17 completed, then they don't need a commitment.

18 CHAIRMAN JACZKO: [affirmative]

19 MELANIE GALLOWAY: So -- and I honestly don't know the details
20 of it right now or what stage we are in the development of these negotiations with
21 the applicant.

22 CHAIRMAN JACZKO: Well, thanks. That's very helpful. One of
23 the other issues, too, we talked about is our -- the new and significant. Do you
24 have a sense, you know, we've done 60-some license renewals.

25 MELANIE GALLOWAY: Seventy-one.

1 CHAIRMAN JACZKO: Oh, sorry, 71. Seventy-one license
2 renewals at this point. How many times have we identified new and significant
3 information as part of reviews?

4 ANDREW IMBODEN: None.

5 CHAIRMAN JACZKO: None.

6 ANDREW IMBODEN: We've not had any.

7 CHAIRMAN JACZKO: Have we identified new issues?

8 MELANIE GALLOWAY: Yes.

9 ANDREW IMBODEN: In just about every plant.

10 CHAIRMAN JACZKO: They're not at the significant threshold? So
11 it is something that does come up, the staff does identify, these issues are just
12 not getting all the way through the process.

13 MELANIE GALLOWAY: Right.

14 CHAIRMAN JACZKO: On a different topic, we did hear an
15 interesting comment from the Connecticut Attorney General about state
16 recognized Tribal governments. Is that something that you've ever thought to
17 reach out and ensure that we're bringing those? I think we heard from the
18 Assistant Attorney General that there may be some state Tribal representatives
19 that are not being contacted in this process. You know, I don't know if that's
20 something we could do or is something that we've considered doing as a
21 possible other --

22 BILL BORCHARDT: That's another Lesson Learned from this
23 afternoon. I'm going to get together with FISME and figure out -- because it
24 would be maybe the 13 original colonies. This was a pre-Federal government
25 issue, so we'd have to check with them.

1 CHAIRMAN JACZKO: Did you want to say something?

2 ERIC LEEDS: I just want to make sure the Commission is aware
3 the work that Melanie and the staff did to reach to the Prairie Island Indian
4 community. You know, they were -- oh what's the exact term, they were --

5 ANDREW IMBODEN: Cooperating agency.

6 ERIC LEEDS: Cooperating agency for the EIS for the Prairie Island
7 plan. So the staff, we routinely reach out to anyone in the vicinity. But the state
8 Tribal, that's something new to me also.

9 CHAIRMAN JACZKO: Well no, I think -- I don't raise that in any
10 way, shape, or form to criticize. I think we have a very good program for Tribal
11 outreach and I think it's a very model program, so just one way to maybe make it
12 better as we go forward. I think those are the main questions.

13 The last comment I'll just make, you know, I think a lot of my
14 colleagues have asked questions about, you know, why people are asking about
15 EP and all these kinds of things and it's always difficult, I think for us to try and
16 understand why other people are doing what they're doing, but I think Bill, as you
17 said, there's probably still some philosophical divide about whether or not our
18 approach to license renewal is the right approach and I think that's accurate. I
19 would perhaps take some disagreement, perhaps, with your and Eric's
20 comments. You know, I think that license renewal is an opportunity, as is any
21 licensing action, for us to get requirements implemented. I remember when I first
22 came to the Commission I was talking with, I think it was Graham Wallace at the
23 time and they were looking, I think, at Peach Bottom. I think it was -- no, not
24 Peach Bottom, Point Beach. I think it was Point Beach license renewal. Point
25 Beach or Kewaunee, one of them, and they were -- at the time their performance

1 was very bad. And I think ACRS was close to crossing the line, you remember
2 this, of issuing a letter that essentially wasn't going to support license renewal
3 because of their ongoing operational challenges. So we do always have the
4 potential to find ourselves in the situation in which plants are performing poorly
5 and yet still receive license extensions. You know, I've gone through phases
6 where I'm comfortable with that and then I get uncomfortable with it. I'm probably
7 in a phase where I'm uncomfortable with it now and, you know, I only have to
8 look at things like GSI-191, NFPA-805, and if you looked at those 71 plants I'm
9 sure there's a subset of those plants that are not yet -- that have not yet
10 completed their GSI-191 work. And I think, you know, it's fair to say that if we
11 made that a condition for their license, for their license extension, in some cases
12 that may actually help move some of those things along.

13 So, I think for some of these areas, as we're seeing a struggle with
14 getting issues resolved, you know, there may be benefits and advantages to
15 having more of that kind of de novo review at licensing and have those issues
16 addressed, you know, that way. So, as I said, I'm in that phase where I'm
17 probably less comfortable with the historical approach than I have been in the
18 past, but sometimes it takes us longer, I think, than we appreciate to get some of
19 these changes implemented and this may be an opportunity to help move that
20 along, but in any case, any other questions or comments from my colleagues?
21 Sure.

22 COMMISSIONER MAGWOOD: Actually, I just forgot to ask this.
23 The industry group was advocating an 18-month implementation period and I just
24 wanted to give you a chance to react to that. I think the staff is proposing a 12-
25 month implementation period. Does it matter? Is that relevant?

1 MELANIE GALLOWAY: Well, you know, we do believe there will
2 be efficiencies gained, both for applicants and for us by the implementation of the
3 rule. We'll all save resources, because as has been noted, even if we stay with
4 the current rule, we're still going to ask the same questions via RAls and so really
5 there's a benefit all the way around by getting it in place sooner rather than later
6 and for a plant that has already initiated the environmental report process, the --
7 you know, our view is that by changing the formatting and the combining is not as
8 significant an undertaking as starting the entire process and so certainly we could
9 do it either way, but we're anxious to save resources and get a more efficient
10 process in place.

11 And then also from our stakeholder standpoint, the organization of
12 the new GEIS is much more readily comprehensible and that will be beneficial
13 when they see applicant submittals coming in in that format and being more
14 readily able to understand them.

15 COMMISSIONER MAGWOOD: Excellent. Thank you very much.

16 CHAIRMAN JACZKO: Well, thank you everybody for a very good
17 presentation. We look forward to seeing the new rule up here sometime in May.

18 [Whereupon, the proceedings were concluded]