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UNITED STATES NUCLEAR REGULATORY COMMISSION  
STATUS OF NEW REACTOR ISSUES - ENVIRONMENTAL ISSUES

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TUESDAY

APRIL 17, 2007

9:00 A. M.

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The Commission convened at 9:00 a.m., Dale E. Klein, Chairman presiding.

NUCLEAR REGULATORY COMMISSION

DALE E. KLEIN, CHAIRMAN

EDWARD McGAFFIGAN, JR., COMMISSIONER

JEFFREY S. MERRIFIELD, COMMISSIONER

GREGORY B. JACZKO, COMMISSIONER

PETER B. LYONS, COMMISSIONER

1 STAFF PARTICIPANTS

2 WILLIAM KANE, DEPUTY EXECUTIVE DIRECTOR FOR

3 REACTOR AND PREPAREDNESS PROGRAMS

4 WILLIAM BORCHARDT, DIRECTOR, OFFICE OF NEW

5 REACTORS

6 JIM LYONS, DIRECTOR, DIVISION OF SITE AND

7 ENVIRONMENTAL REVIEWS, NRO

8 BRENT CLAYTON, BRANCH CHIEF, ENVIRONMENTAL

9 TECHNICAL SUPPORT, NRO

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

CHAIRMAN KLEIN: Good morning. Obviously, before we start I think as we had acknowledged yesterday, it's certainly a tragedy of the events that occurred at the Virginia Tech campus. That's always disheartening when there's any loss of life. I think it's particularly disheartening when there are so many young people whose lives have been taken prematurely in a case like this.

So I'm sure we send our regrets to the families and all those impacted as well as a lot of our employees probably have either relatives, friends and so forth at the Virginia Tech campus.

We will probably send out a yellow notice later today on behalf of the NRC as soon as we can get that out. So with that, we'll go to happier news.

Today we're going to hear about the New Reactor activities on environmental issues; issues that are near and dear to all of our hearts. One of the good things I think that has happened in this area is that the Standard Review Plan was issued as well as two early site permits for both Clinton and Grand Gulf. Upcoming is North Anna and then the Vogtle, so we have a lot of good news to hear about. We look forward to that. Any comments from my fellow Commissioners before we start?

COMMISSIONER MERRIFIELD: Yes, Mr. Chairman. I appreciate the opportunity to have this hearing today, this meeting today. As you know, my pedigree is as an environmental attorney so these issues have been of great interest to me since I joined the Commission.

1 I think when you look back at the litany of issues that this Commission has  
2 dealt with over the years in terms of the progress toward building new reactors;  
3 you can go back to the '70s and '80s and even through the early '90s when we  
4 were completing the last units.

5 Alignment on environmental issues has always been difficult. They're  
6 challenging issues. They're complicated. They're very site specific. Clearly, we  
7 have an obligation under the National Environmental Policy Act to look very  
8 carefully at these matters to make sure that we are appropriate stewards of the  
9 environment in the oversight activities we have in judging the applicants that come  
10 before us.

11 These have been very contentious issues. They have been the subject of a  
12 great deal of litigation in the past. I think our staff has worked tirelessly and I've  
13 had a chance to meet with a number of the members of our staff who deal with  
14 these environmental issues.

15 I think they've worked tirelessly to understand the scope of issues brought  
16 not only to us as an agency but to the Federal government under the auspices of  
17 NEPA and have attempted to craft a schedule that will be thorough, will be  
18 encompassing of the litany of environmental issues that may confront these sites.

19 And I think our trying today to put together a plan that will allow us to meet  
20 our requirements of potentially reviewing these applications, but doing so in a way  
21 that is clearly reflective of being sensitive to the environmental consequences of  
22 what could be a potential reactor siting.

1 I had urged the Commission to have a meeting on this issue because  
2 obviously as we move forward in the potential COL process, environmental issues  
3 will certainly come to the fore very, very quickly.

4 Having had a series of discussions with the staff, I do believe that much  
5 positive work has been put in place to help us move through this process.

6 Certainly, I will be interested to explore today and hopefully the other  
7 members of the Commission can as well, are there further actions that the  
8 Commission can take to further promote efficiency in our process? Are there  
9 actions that the staff has impediments that we may be able to resolve? Are there  
10 issues that we can focus on that will allow us to meet our mission toward the  
11 environment towards NEPA and yet doing so in a way that is timely, effective and  
12 efficient and in accordance with our Strategic Plan.

13 I think that is the spirit for which I certainly ask that we have this meeting  
14 today and I look forward to hearing from our staff and their explanation and being  
15 able to probe a little bit in terms of how we can define some potential further  
16 efficiencies in moving forward. Thank you, Mr. Chairman.

17 CHAIRMAN KLEIN: Thank you. Bill?

18 MR. KANE: Good morning. Thank you, Mr. Chairman and  
19 Commissioners. This is the second in the series of bimonthly meetings with the  
20 Commission and the Office of New Reactors. As you indicated, this will focus on  
21 environmental reviews. We'll discuss not only how we are applying the lessons  
22 learned from the early site permit reviews, but also how we are looking at the

1 lessons learned from work that takes place during license renewals and beyond  
2 that across the agency and what we're trying to do is to take those lessons learned  
3 and as you say and implement it and go forward.

4 To acknowledge Commissioner Merrifield's comments, I think we all agree  
5 on this side that actually this is an ongoing process. We're going to have to  
6 continue to look at this area as we move forward to make sure that we are serving  
7 the interest of the effectiveness and efficiency of our operations as well as serving  
8 the public's interest in this regard. We will continue to do that.

9 At this point, I'd like to turn it over to Bill Borchardt, Director of the Office of  
10 New Reactors.

11 MR. BORCHARDT: Good morning. Slide Two, please. Doing the  
12 bulk of the presentation this morning will be Jim Lyons. Jim is the Division Director  
13 for the Division of Site and Environmental Reviews in the Office of New Reactors  
14 and with him is Brent Clayton. He's the Branch Chief in the Environmental and  
15 Technical Support Branch. Slide Three, please.

16 Chairman, as you mentioned, there's been a number of activities completed  
17 recently that show that the Part 52 process works; that the valuable work that the  
18 Office of Nuclear Reactor Regulation did before the creation of the Office of New  
19 Reactors was well done, of high quality and timely and the Office of New Reactors  
20 has picked up those work activities and continued on schedule meeting our  
21 obligations to date.

22 Two early site permits were signed within the last several weeks; Clinton

1 and Grand Gulf. Over 280 sections of the Standard Review Plan have been  
2 updated and put on the web, made available for all of the stakeholders use and for  
3 use of the staff. It's notable that this is the first complete update in about 30 years  
4 for the Standard Review Plan. It was long overdue. It would have greatly  
5 impeded our ability to make progress had we not done this work.

6 I think we all share in the objective to never let ourselves get this far behind  
7 on the infrastructure again. This is something we need to continuously keep  
8 up-to-date in order to make progress.

9 Going along with the Standard Review Plan, the Office of Research has  
10 completed a lot of work on the Regulatory Guides and has likewise made those  
11 available.

12 Staffing and training is moving along very well. We now have about 300  
13 people in the Office of New Reactors. There's 21 known gains. Those are people  
14 that have accepted job offers and are in the process of coming on board moving  
15 into the area.

16 Chairman approved two contract acquisition actions which are very large  
17 proposals for us to move forward with the contracting strategy that utilizes both  
18 commercial and national laboratory work to help supplement the NRC staff's  
19 efforts both in the environmental and in the safety arena.

20 This will allow us to continue to do work and to dampen the peaks and  
21 valleys and even load the entire work activities for all the projects. Slide Four,  
22 please.

1           There's a number of activities that we won't spend a lot of time on today,  
2           but that we're actively engaging the industry in order to make progress and keep  
3           the process moving as we get ready for the COL applications and future design  
4           certification reviews.

5           One of those has to do with the early resolution of design acceptance  
6           criteria. Design acceptance criteria term doesn't appear in Part 52. It's really a  
7           subset of the inspections, tests, analysis and acceptance criteria. But there's only  
8           in our thinking three real ways that you can address design acceptance criteria.

9           One is you can amend the rule, the design certification rule. The second  
10          way is the combined license applicant can submit the design information as part of  
11          the COL application in which case the staff would review that, issue the combined  
12          license, and then any subsequent combined license applicant could then make  
13          use of that resolution; however, it doesn't afford the same issue preclusion as the  
14          design certification rule does.

15          The third way to resolve design acceptance criteria is to do it during the  
16          construction of the facility. We are doing an outreach now with both the design  
17          vendors and the COL applicants to make sure they understand those three  
18          scenarios.

19          There is still some thinking in my mind of the old Part 50 process where  
20          there could be a staff and applicant agreement that could just then be referenced  
21          for all subsequent applications. We're in a slightly more controlled process under  
22          Part 52.

1           It provides great benefits, great issue preclusion and it allows  
2 standardization, but there are some additional controls under this licensing  
3 process.

4           The ESBWR design certification review is working; however, it's not making  
5 as much progress as we would have hoped. We are anticipating GE's submittal of  
6 Revision 4 to their design control document this fall.

7           It's our understanding and our expectation that that revision will address the  
8 open issues that have been identified so far by the staff. We've been informed  
9 that GE is making some additional design changes that we have not yet seen, but  
10 that will be submitted in this new revision.

11           In order to establish a schedule for the ESBWR and the design certification  
12 milestones, we've requested that GE submit an integrated schedule of future  
13 deliverables, including additional information to fully describe the design changes I  
14 have referenced.

15           GE is committed to provide this integrated schedule by the end of this week  
16 and after we get that we'll work with them to create a revised design certification  
17 review schedule.

18           COMMISSIONER McGAFFIGAN: Mr. Chairman, can I just ask a  
19 clarification? How many requests for additional information once the application is  
20 docketed has the staff sent out at this point?

21           MR. BORCHARDT: I don't have the full number. It's 2,000-  
22 something, I think. All I can say right now is it's over 2,000; way more than we

1 would have liked.

2 MR. SHUAIBI: This is Mohammed Shuaibi, the Branch Chief for  
3 ESBWR/ABWR Projects Branch. We've issued about 2,900 requests for  
4 additional information.

5 COMMISSIONER McGAFFIGAN: Are more coming or is that the first  
6 round?

7 MR. SHUAIBI: There are more. It's not 2,900 more, but there are  
8 more RAIs coming.

9 MR. BORCHARDT: It depends on of the thoroughness of the  
10 revision.

11 COMMISSIONER McGAFFIGAN: I understand. It's a dynamic  
12 process. Do you have any regrets docketing something that has 2,900 RAIs and  
13 more to come?

14 MR. BORCHARDT: I think my answer to that is "no" because of the  
15 work that we had on our plate at the time that we accepted that application.  
16 Should there be a combined license application that comes in that would cause  
17 that many RAIs, I think we would either not accept it in the future or we would  
18 establish a schedule that was much longer than what our baseline model schedule  
19 would be at this point.

20 COMMISSIONER McGAFFIGAN: Can I translate that to you  
21 basically had staff available at the time that this was docketed and the perception  
22 is that in the future when the bow wave hits us you probably won't have excess

1 staff to work on projects like this?

2 MR. BORCHARDT: We will not have excess staff.

3 COMMISSIONER McGAFFIGAN: Thank you.

4 COMMISSIONER JACZKO: Mr. Chairman, can I follow-up. When  
5 you docketed the application how many RAIs did you anticipate having issued?

6 MR. BORCHARDT: I don't know that we had a target in mind. We  
7 did a review of the application against the acceptance criteria as part of our  
8 acceptance review. It addressed the areas that were required.

9 COMMISSIONER JACZKO: Were you anticipating having to issue  
10 2,900 RAIs?

11 MR. BORCHARDT: I certainly wasn't.

12 COMMISSIONER JACZKO: I ask this because you made a  
13 comment that I think that if we get a COL that would require 2,900 RAIs we  
14 wouldn't docket an application like that and that raises a question in my mind  
15 whether we have the right kind of acceptance criteria to identify applications that  
16 really are not meeting the quality standards that we expect.

17 It seems like going in I remember at the time we had discussions about  
18 docketing and there was kind of a back-and-forth initially. We did not initially  
19 docket the application. We sent it back and took some extra time and it seems like  
20 that still didn't quite get it where it needed to be.

21 I'm wondering, and maybe we can look at this in the SRM, but it might be  
22 worth taking a look at the acceptance criteria and how we're doing the acceptance

1 reviews to make sure we're really identifying those.

2 As you say, if we get a COL with those kind of problems that's really one  
3 that we would be challenged to accept and to move forward. If we don't have a  
4 good way to identify early on the quality of the applications, we might want to take  
5 a look at that.

6 MR. BORCHARDT: One of the lessons that we've learned is we  
7 believe we need to do a more thorough acceptance review of all the applications.  
8 I think there's two benefits to that. One is it will prevent us beginning work on an  
9 application that will require an extensive number of RAIs.

10 But two, it will also allow us to establish a more meaningful, more  
11 application specific review schedule. The better the application, the more timely  
12 we think we can do our review.

13 An application that is not as good may have a protracted schedule. We've  
14 been talking to the prospective applicants about that. They understand. They're  
15 all motivated to get the best application in that they can.

16 We are expecting to take more time than the traditional 30 days to do an  
17 acceptance review in order that we can do a more thorough one which will we  
18 think lead in long-term schedule benefits and efficiencies.

19 COMMISSIONER MERRIFIELD: Mr. Chairman, I would just say I  
20 think we've talked, I've had an opportunity to talk to the staff about this as part of  
21 the task force review that we've conducted. I would say that we have an analog,  
22 and the analog would be the license renewal process where as we went along we

1 did recognize that there were applications that did not meet our criteria and the  
2 staff did make the recommendation to go ahead and not accept those for review.

3 I do think that has been long in planning in the staff to try and marshal  
4 resources in such a way as to get a better upfront scrub in terms of scope and  
5 depth of the quality of application before they move forward. I think there's quite a  
6 bit of merit to that proposal.

7 CHAIRMAN KLEIN: Pete?

8 COMMISSIONER LYONS: Since we're addressing a number of  
9 questions on RAIs, Bill, can you give us a feeling for - I realize every application is  
10 going to be different, but can you give us a feeling for what number of RAIs have  
11 been issued for some of the other design certs? Just ballpark?

12 MS. CUBBAGE: Amy Cabbage, New Reactors Office. On the  
13 AP600 design there were in the order of 6,000 to 7,000 RAIs. When we were  
14 planning the ESBWR we did anticipate that there would be a large number of RAIs  
15 and built infrastructure to track those RAIs. The number is a little higher than I  
16 would have expected but there is very large scope of review. It's a lot of work to  
17 be done on the certification.

18 CHAIRMAN KLEIN: Do know how many for the ABWR?

19 MS. CUBBAGE: Jerry Wilson might be able to help me out. I think  
20 the number was a little lower; however, being an active plant and evolutionary  
21 rather than advance passive design there weren't as many hard technical issues to  
22 be worked through. On the ESP the numbers have been down in the 100 to 200

1 or 300 range.

2 COMMISSIONER LYONS: Thank you. Putting that in perspective,  
3 this isn't that far out of line compared with the AP600?

4 MR. BORCHARDT: Not in total numbers. I think my view of AP600  
5 and AP1000 is a lot of those were driven but because it was the first time we were  
6 looking at a passive design so there were a number of RAIs associated with that.

7 COMMISSIONER MERRIFIELD: Mr. Chairman, if you want to look at  
8 that as the glass being half full rather than half empty, it refutes claims by some  
9 that our staff doesn't have a questioning attitude.

10 COMMISSIONER McGAFFIGAN: Mr. Chairman, I also want to point  
11 out that on AP1000 and AP600, especially AP600 with the number that was given  
12 to us, we are taking a rather leisurely approach to the whole thing because there  
13 was no follow up; nobody was going to buy one any time soon. That's not the  
14 situation we are in here where people want to buy things soon and we have to  
15 identify where the long poles in the tent are.

16 CHAIRMAN KLEIN: I think from my initial observation on the  
17 ESBWR it has not been as much as the number of RAIs as the time that has been  
18 taken for a response. Could you comment on that?

19 MR. BORCHARDT: That's certainly true and that's our concern  
20 about getting this next revision to the design control document and it having been  
21 thorough. We've struggled with getting responses and being able to keep the  
22 process moving and that's why the importance of this next revision this fall is key

1 to making our schedule.

2 CHAIRMAN KLEIN: Thanks.

3 MR. BORCHARDT: We can move to Slide Five. This slide lists a  
4 few of the near term activities as we mentioned earlier. The North Anna early site  
5 permit process is moving along. There's a number of rulemakings and the Vogtle  
6 early site permit that Jim may talk about a little bit later is moving along.

7 There's an engagement with the Vogtle staff now about responding to a  
8 number of key issues. So there's some concerns about the timeliness of those  
9 responses as well in order for us to stay on schedule. We are hopeful that we will  
10 be able to resolve those. Slide Six, please.

11 New Reactors continues to be a very dynamic and evolving picture. Since  
12 the last Commission meeting on New Reactors, Texas Utilities has announced  
13 that they have selected the U.S. Advanced Pressurized Water Reactor design.

14 There will be two units at Comanche Peak now and other activities that they  
15 had made mention of previously that they will not pursue at this time. Right now,  
16 its two units at Comanche Peak utilizing the Mitsubishi US APWR design.

17 COMMISSIONER MERRIFIELD: Mr. Chairman, just one quick  
18 question. On the issue of this design, that was not budgeted for in our FY07  
19 budget. Can you just sort of briefly comment?

20 COMMISSIONER McGAFFIGAN: Or '08.

21 COMMISSIONER MERRIFIELD: Or '08. Thank you for the  
22 clarification. Can you talk a little bit about how the staff is going to deal with that

1 given the fact that we did not anticipate having this come before us?

2 MR. BORCHARDT: So far in the US APWR design we expended  
3 about a half of FTE worth of effort. We're able to do that due to other work that's  
4 either accomplished more efficiently than we had expected or what we expect in  
5 2008 is that as some schedules slip, as I go through the rest of the slide you'll see  
6 that some COLs are now coming off of our planning horizon. That will free up  
7 some resources.

8 During 2007 and 2008, we're just going to take advantage of resources that  
9 get freed up in order to do pre application work on the Mitsubishi design. It's really  
10 just taking advantage of that opportunity.

11 As you mentioned, they're not separately budgeted for during those two  
12 budget years. Amarillo Power has selected the Evolutionary Power Reactor.  
13 They've announced that their combined license application will come in the last  
14 calendar quarter of 2008. That's a six month delay. They have decided not to  
15 pursue an early site permit.

16 After these slides were submitted, so this is only a little over the week ago,  
17 Callaway has announced that they selected the Evolutionary Power Reactor and  
18 will be coming in for a combined license application in September of 2008.

19 In addition, there's one unannounced applicant who asked that their  
20 identification be held for proprietary reasons, that has informed us that they are  
21 expecting to come in with an early site permit in the 2010/2012 time frame. So  
22 both of those announcements were very, very recent.

1           In order to help us get the best picture of what the future looks like,  
2   yesterday we issued a Regulatory Information Summary which asks all of these  
3   applicants and any other prospective applicants to let us know of their plans and  
4   additional details, including when they would expect to begin construction activities  
5   and onsite activities. We need to know that so that we can do timely hiring and  
6   training in Region II and the other Regions in order to support site activities.

7           In addition, not listed on the slide, Florida Power and Light has selected the  
8   Turkey Point Site for their New Reactor project. Slide seven.

9           Jim Lyons will cover the topics listed on this slide.

10           COMMISSIONER MERRIFIELD: Are you on slide 7 or slide 8.

11           MR. BORCHARDT: I'm sorry, slide 7.

12           COMMISSIONER MERRIFIELD: No, I think the Commission has a  
13   different set of slides.

14           MR. BORCHARDT: I'm on the one that says Environmental Reviews.

15           COMMISSIONER MERRIFIELD: That's our slide 8.

16           MR. BORCHARDT: I'm sorry. Jim Lyons will cover the topics on this  
17   slides. I'd just like to make the point the lessons learned that Jim will talk about  
18   will be applicable to our work whether or not we have early site permits or just  
19   combined licenses. We'll need to do environmental reviews for those projects  
20   regardless of which Part 52 activities they take advantage of.

21           I'd also like to take an opportunity to acknowledge the very open and  
22   inclusive way in which Jim and his team are managing the divisions. They're

1 demonstrating one of the values that we're hoping to instill in the Office of New  
2 Reactors about being open and being receptive to differing views from within the  
3 staff and there have been a number of non-concurrences within Jim's division that  
4 have been very openly and appropriately dealt with.

5 At the end of the process, I believe that all of the staff, each and every  
6 individual member has been satisfied with the ultimate resolution of the issue.  
7 Their issue has been heard, it's been addressed and resolved. It's been a very  
8 healthy way for the office to move forward. With that, I'll turn it over to Jim Lyons.

9 MR. LYONS: Thank you, Bill. I'd like to start off to talk a little bit  
10 about the environmental review process on Slide Nine. The NRC reviews are  
11 conducted to meet our responsibilities under the National Environmental Policy  
12 Act.

13 The staff's Environmental Impact Statement identifies and assesses  
14 environmental impacts resulting from the issuances of an early site permit or a  
15 combined license and to determine if there are obviously superior sites or superior  
16 projects to the proposed project. And that the Environmental Impact Statement  
17 also identifies any potential mitigation measures that could reduce or avoid the  
18 adverse impacts. We see this as very important.

19 The purpose of this slide is showing a real overview the way we conduct  
20 our reviews. As Commissioner Merrifield pointed out, we use the experience  
21 we've learned with the license renewal applications and with the early site permit  
22 applications to develop this process and we are continuing to try and update and

1 revise it.

2 After we received the applicant's environmental report, we issue a notice for  
3 an opportunity for a hearing and we begin the review by determining the scope of  
4 the issues that were going to be addressed during the review.

5 We hold a public scoping meeting in the vicinity of the site to solicit input  
6 from interested stakeholders on issues that they think need to be addressed; to  
7 include the public, State and local officials, are all invited to that.

8 All the comments that we receive during the scoping period are captured  
9 and we address them in the scoping summary report that's appended to the draft  
10 Environmental Impact Statement.

11 In accordance with our regulations, the staff independently evaluates and is  
12 responsible for the reliability of all the information that's used in the Environmental  
13 Impact Statement.

14 Therefore, the staff conducts a site audit to get out to the site; to get on the  
15 ground and see how we're addressing the information. We also at that site audit  
16 and I'll talk about that a little bit more, identify additional information that we need.

17 Once the staff has received the information identified in the audit and the  
18 applicant's response to requests for additional information, we develop the draft  
19 Environmental Impact Statement and issue that for public comment.

20 The draft Environmental Impact Statement is only draft in the sense that it  
21 hasn't been commented on by the public. There are no outstanding issues. There  
22 is nothing to be resolved later like you see in a draft Safety Evaluation Report that

1 we issue say on a design certification review.

2 We really at that point have our final document, but it's only affected by our  
3 resolution of the comments that we receive either from the public or from other  
4 Federal, State or Tribal authorities that would provide us information.

5 We hold a public meeting after the Environmental Impact Statement is  
6 issued to solicit comments, to hear comments from people directly, to address any  
7 questions they may have so that they can finalize their comments and then we  
8 issue the final Environmental Impact Statement that includes a summary of how  
9 we resolved all the comments that we've received up to that point, so that each  
10 commenter can go in and actually find out where their comment is addressed.

11 The final step is to hold any hearings that are required by regulations, either  
12 the contested hearing if contentions are admitted by the Atomic Safety Licensing  
13 Board or mandatory hearings that are required in order for - right now the board  
14 looks to see whether the staff's review under the National Environmental Policy  
15 Act is sufficient.

16 The hearings have been more resource intensive than we expected by  
17 about a factor of three. When we were looking at them, so the mandatory  
18 hearings have been a resource. Obviously, once the Board issues its initial  
19 decision it comes to the Commission and once the Commission has affirmed the  
20 hearing board's determination we would issue either the early site permit or the  
21 combined license review.

22 COMMISSIONER McGAFFIGAN: Mr. Chairman, can I ask a

1 clarifying question? The licensee or the applicant by the time this process starts  
2 has submitted an environmental report as part of the application? How important  
3 is it that their application has been thorough so that you can largely play off of it in  
4 the draft environment?

5 MR. LYONS: Very important. Very important. I will discuss that in  
6 subsequent slides.

7 COMMISSIONER McGAFFIGAN: And there's one variation that I  
8 only recently became aware of in the context of Watts Bar 2. TVA is a Federal  
9 agency. They have to do an EIS before we do our EIS. Is that also going to be  
10 the case at Bellefonte or is that because it's multiple owners?

11 MR. LYONS: I'm not sure exactly how they'll do that because it is  
12 multiple owners.

13 COMMISSIONER McGAFFIGAN: In the case where it's purely TVA -

14 MR. LYONS: We would use any Environmental Impact Statement  
15 that's available to us. We have the ability to tier off the other Environmental  
16 Impact Statements, whether it's TVA or whether EPA does something. If FERC  
17 issues an Environmental Impact Statement say on a transmission line corridor, we  
18 can use that. We'll look for any way we can to use information that's out there.

19 MR. BURNS: I won't presume to speak for TVA. I would imagine  
20 that TVA, as a participant, would have to prepare a statement because if NEPA  
21 applies to them as the Federal agency obligated to evaluate potentially major  
22 Federal action, they would have to prepare it whether or not they're a co-owner.

1                   COMMISSIONER McGAFFIGAN: If that's the case, Bellefonte is one  
2 of the early applications we're supposed to get, October or something, and in the  
3 case of Watts Bar 2 they're already doing scoping meetings and drafting reports.  
4 They're in the early stages of their process. I haven't heard anything in the  
5 Bellefonte context that they're doing an Environmental Impact Statement.

6                   MR. LYONS: I'll touch on this later. We're starting pre-application  
7 activities at Bellefonte. In fact, I have a team of staff out there right now as we  
8 speak working with them. I would be able to answer that question much better  
9 later, probably later on this week.

10                  COMMISSIONER McGAFFIGAN: Make sure they know what Mr.  
11 Burns has said. probably later on this week.

12                  COMMISSIONER JACZKO: Mr. Chairman, can I just ask a question  
13 about the budget here, the factor of three? You say that the hearings have been  
14 more resource intensive than budgeted. Has that changed in the sense that  
15 you're now budgeting for more resources for the hearings?

16                  MR. LYONS: We are revising our budget models, yes.

17                  COMMISSIONER JACZKO: The '08/'09 budget -

18                  MR. LYONS: We have a licensing project plan that we're going to  
19 devolve for every one of the applications and it will be part of that. We will  
20 incorporate that.

21                  MR. KANE: We're looking at the '09 budget right now and it will be  
22 considered for that. But then for '08, which we have to look at the same time we'll

1 have to address that question.

2 COMMISSIONER JACZKO: So it's not been addressed yet for '08 in  
3 terms of the budget that came to the Commission?

4 MR. LYONS: Right. Right now we don't have any hearings in the  
5 environmental area that we would see happening in '08. I don't think we'll be to  
6 that point yet - mandatory hearings.

7 COMMISSIONER McGAFFIGAN: Steve, can I just clarify the  
8 question. The applicant at Bellefonte, it is at the TVA site, but the applicant is  
9 NuStart, of which TVA is a very small percentage stakeholder. Does that make a  
10 difference in your mind? You may not - perhaps take it under advisement - and  
11 your previous answer may need to be amended.

12 MR. BURNS: Possibly.

13 COMMISSIONER McGAFFIGAN: Possibly. Ok, we've opened up a  
14 can of worms.

15 MR. LYONS: If I could go to Slide 10, please. As Bill said, we issued  
16 two early site permits to date and we're about to go to hearing on the third. We've  
17 learned lessons from these reviews that will help us continue to improve our  
18 process.

19 I've broken up the lessons learned here; one from the applicant's point of  
20 view and one from the staff's point of view. From the applicant's point of view,  
21 obviously the major issue we see is that we need to continue to encourage high  
22 quality submittals and timely responses to our request for additional information.

1 High-quality submittals, just as you pointed out Commissioner McGaffigan,  
2 will help reduce the need for requests for information, maybe even eliminate them.  
3 I know in the license renewal arena we have actually written letters to applicants or  
4 licensees that said we don't have any questions on your environmental report  
5 you've done such a good job. We'd like to get to that point with everybody. It also  
6 eliminates contentions from being admitted for areas and issues that haven't been  
7 addressed.

8 Once we have a contention issued for a contested hearing, the staff has to  
9 develop a hearing file. That adds about 10 to 15% to our resources; just the care  
10 and feeding of that hearing file by having to put all that information into it.

11 I'd like to thank the Commissioners for your support on this area at the  
12 Regulatory Information Conference. I think almost every one of you made a point  
13 that we need to have high-quality submittals from the applicants in the COL  
14 process.

15 The other thing we've done is we're also encouraging prospective  
16 applicants to have early interactions with Federal, State and Tribal agencies to  
17 secure the necessary permits that they'll need to obtain under other statutes such  
18 as the Clean Water Act and Coastal Zone Management Act.

19 Gene Grecheck of Dominion pointed out at the Regulatory Information  
20 Conference that they lost about a year on their North Anna site permit with their  
21 interactions with the state of Virginia. As a result of that, at the Regulatory  
22 Information Conference, we had a session on just this issue on how we could

1 better interact with other players in this area.

2 I had speakers from the Environmental Protection Agency, Virginia State  
3 Historical Preservation Office, Duke who is in the process of doing their  
4 application, and a consultant from CH2M HILL who had worked on the Clinton  
5 project.

6 They discussed how they had interacted with the public and the other  
7 government agencies and how they were able to handle those issues and the best  
8 ways of going about it. If we go to Slide 11, please.

9 COMMISSIONER MERRIFIELD: Just a quick question. The issue at  
10 North Anna related to the use of Lake Anna as the source of the cooling water and  
11 heat flow associated with that source. The issue of water quality, Clean Water Act  
12 and the use of water bodies has been quite a contentious issue over the history of  
13 the time that we've reviewed reactor applications.

14 Have we got any indication of the extent to which future licensees are going  
15 to rely on those types of either river, lake or ocean sources of cooling, or is there a  
16 much greater number of those folks going in the direction that Dominion has gone  
17 with North Anna, that is to use either a forced or draft cooling tower?

18 MR. LYONS: I think we have seen both. There's some, South Texas  
19 has told us -

20 COMMISSIONER MERRIFIELD: They've got a pond.

21 MR. LYONS: They have a pond that they have created. North Anna  
22 created Lake Anna for cooling.

1                   COMMISSIONER McGAFFIGAN: They created a coastal zone  
2 waterway under the definition of that Act.

3                   MR. LYONS: So, I've heard both. I think it's one of the things that we  
4 will be trying to address as part of the pre-application work that we want to do with  
5 them so that we can understand those issues and try to raise them up early. It is  
6 really one of the areas that we want to address as part of the pre-application  
7 review.

8                   I split up my staff related issues. The first is we need to have highly  
9 qualified and trained staff and contractors ready to conduct the multiple  
10 applications that we expect. I tried to do a little graphic here to show you the  
11 areas that we review as part of the environmental review.

12                   You can see that my staff specializes in areas that are outside of the normal  
13 engineering disciplines that we associate with the safety review. We cover topics  
14 such as water quality, aquatic and terrestrial ecology, and archaeology, all the way  
15 to socioeconomics and environmental justice.

16                   For some areas such as hydrology, radiation protection and accident  
17 analysis we're able to use the same staff to conduct both the safety and the  
18 environmental reviews so that we were consistent in our application and to avoid  
19 any duplication and effort. Continuing on to slide 12.

20                   The strategy we developed in order to deal with the bow wave of  
21 applications that we're expecting is to heavily leverage the use of contractors. In  
22 fact, about 60% of the review is done by contractors.

1           That requires a lot of oversight on our part by our staff, but we have  
2           established at the Pacific Northwest National Lab a core group of specialists that  
3           have experience both with the license renewal reviews and now with early site  
4           permits to provide us with a core group.

5           In addition to our qualification program that we have here, we're also trying  
6           to team up our new members of our staff and new members of the contractors  
7           with more experienced members, going through shadowing exercises where they  
8           will shadow the experienced people on the site visits we're doing with the pre-  
9           application reviews. Also, they will be mentoring them so that they can come up to  
10          speed and be ready to work.

11          Another lesson that we learned from the license renewal was the value of  
12          conducting the site audits. Rather than just taking the environmental report and  
13          reviewing it in our office at our desk and then trading questions back and forth and  
14          responses in paper, what our staff does is it reviews the environmental report, it  
15          writes as much of the draft of the Environmental Impact Statement as it can, it  
16          leaves holes open, we send a team to the site, we try to first of all verify the  
17          information that's in the environmental report. We audit that to make sure that  
18          we're getting good information and then we develop what other information we  
19          need to gain from the applicant to submit. That results in fewer RAIs and a better  
20          understanding of what is actually needed for us to do our review.

21          One of the things that caught us off guard during the early site permit  
22          reviews was the volume of public comments that we received, especially on North

1 Anna. We received some 13,000 comments from around 1,300 commenters.

2 I want to thank the Office of Information Services for working with us to  
3 develop a way to capture comments that were sent in by e-mail. The original way  
4 we had to do it is a project manager had to printout each e-mail. It had to then be  
5 sent in, scanned into a PDF file and then profiled and put into ADAMS. We now  
6 have a system where we can electronically send the comments over to a system  
7 that automatically converts it into a PDF file, assigns a comment number and  
8 automatically profiles and adds it into the system. It's one of the ways that we see  
9 that we're going to be able to improve our process.

10 This process was successfully employed during the comments we received  
11 on the draft supplemental Environmental Impact Statement for North Anna.

12 COMMISSIONER McGAFFIGAN: I just want to clarify. You didn't  
13 really receive 13,000 independent comments. A lot of them were duplicates.

14 MR. LYONS: A lot of them were duplicates.

15 COMMISSIONER McGAFFIGAN: Does your technology allow you to  
16 say this is the 4,500<sup>th</sup> time I've gotten this comment and I'll just deal with it as one  
17 comment?

18 MR. LYONS: That's the other thing we've done. Through Pacific  
19 Northwest National Laboratory we've developed a system that captures the  
20 comments, helps us bin them so that when we see repeating comments we can  
21 bin them all together. We only respond - if we get 1,000 comments that are  
22 identical, that's actually very easy. We'll bin them together and we'll provide one

1 response. We do have a process to do that. That's not automatic. It takes some  
2 intervention.

3 The other thing that this program is going to allow us to do is to capture and  
4 retain these comments so that in future applications we're able to query the  
5 database, find out if we received the same or similar comments before and be able  
6 to use the responses if they're still applicable. Again, it's so we don't have to  
7 reinvent the wheel. It's one of the infrastructures that we've set up.

8 CHAIRMAN KLEIN: My guess is with the advent of e-mail and  
9 computers you're going to get a lot more questions than you had in the past.

10 MR. LYONS: That's true. We're now set up where we can handle  
11 that. Whereas before we were trying to do this manually and that was very  
12 resource intensive and time consuming for the project managers and for our staff  
13 to do that. The last two items on this slide are lessons we learned from our first  
14 two hearings. We received quite a number of questions by the boards -

15 COMMISSIONER MERRIFIELD: Mr. Chairman, I'm sorry. Can I  
16 interrupt for a second since we're on comments? One of the difficulties of  
17 electronic systems today is you can have a server with a series of e-mail  
18 addresses, select and send out automatic e-mails even though perhaps the  
19 person the name of the e-mail is coming under isn't even aware of. It's done in  
20 situations where you want to swamp a system, have we, particularly as it relates to  
21 emails - have we considered any type of system that can validate the fact that it's  
22 a legitimate e-mail sender so that we're not unnecessarily swamped with spurious

1 emails?

2 MR. CLAYTON: We haven't gotten to that detail yet. It's probably  
3 not a bad idea.

4 MR. LYONS: It's probably not a bad idea to think about ways to do that.  
5 The main thing we try to do - it's similar to in the past we used to get postcard  
6 comments where the postcards would be reproduced and sent in.

7 We were able to comment, to bin those comments, bring them together and  
8 respond to them in one response to a number of comments. Actually, those are  
9 the easier ones to resolve. It's the ones that have true significant issues that are  
10 raised. Those are the ones that cause us to go back and do a lot of work.

11 COMMISSIONER MERRIFIELD: Mr. Chairman, not to digress too  
12 much. I'm reminded when I first got to Washington, D.C. I was a legislative  
13 correspondent for Senator Gordon Humphrey, which is pretty much the lowest part  
14 of the totem pole on Capitol Hill. I spent about a year doing nothing but answering  
15 mail.

16 The lesson we always had in our office - I don't think other offices were  
17 different - if you get a postcard and all the person did was sign the bottom of it, it's  
18 far different than if you get a hand-written note from someone that's three pages  
19 long, because obviously the person took a lot more care and effort to sit down and  
20 articulate what their feelings are.

21 So, in a very inarticulate way we were in fact binning our responses to  
22 those in some regard. I think these are the types of things that we've had to do

1 and will continue to have to do, particularly with the advent of e-mail. We can get  
2 a lot of stuff out there that perhaps maybe not fully recognizing the strength of  
3 where these folks are coming from.

4 MR. LYONS: From the hearings from the questions we received from  
5 the Atomic Safety and Licensing Boards that were sitting on these, we see the  
6 need to more clearly articulate the logic that we use in developing the positions we  
7 take in the Environmental Impact Statement and in addition the Boards wanted to  
8 know where the applicant had deviated from our guidance and asked us to  
9 develop a list for them of that.

10 In the future we will try and keep track of those and be clearer about it,  
11 where they deviated and how we resolved those instances. Slide 13.

12 Obviously, in addition to the lessons we learned from all the early site  
13 permits we're preparing for the combined license applications. The first thing  
14 we've done is we have contracts in place that we need to provide the infrastructure  
15 and support to conduct these reviews.

16 The research pool we have through the Pacific Northwest National Lab and  
17 the consortium that we developed through them will grow to about 150 specialists  
18 that will be able to support us. They won't all be full time for us.

19 We'll only have them for part of that time, but they'll be there to help us.  
20 We've implemented orientation programs at both PNNL and also to the other  
21 contractors that are supporting them that provide some classroom activities to  
22 bring them up to speed on our process and how we're doing things and we're also

1 as I talked about before having the newer members shadow the team members at  
2 these pre-application site visits. And also we'll help mentor them through the  
3 audits and reviews.

4 COMMISSIONER McGAFFIGAN: Can ask a clarifying - how many of  
5 the 150 have previously worked for us on license renewal?

6 MR. LYONS: There's probably a group of about 30 or 40, I think.  
7 About 40.

8 COMMISSIONER McGAFFIGAN: So we have 40 experienced folks  
9 who've been through the processes like this before or perhaps not as  
10 comprehensive and then we have 110 who are going to be brought along. So  
11 that's about a three to one ratio.

12 MR. LYONS: That's probably very similar to my staff here in  
13 headquarters as we grow. I have about 20 people on board right now. I'm going  
14 up to about 40 in the environmental review area. There's probably a core of about  
15 less than 10 that have a lot of extensive experience and there's a few that have  
16 been involved in the early site permit reviews that have gained some experience  
17 and are becoming more and more seasoned every day as we move through the  
18 process.

19 MR. CLAYTON: Jim, if I could just add. My staff has been going out  
20 and having orientation sessions with a lot of these people to get them a little  
21 classroom training if you will on how we do business and the way we operate.

22 COMMISSIONER McGAFFIGAN: I appreciate that. I just want to

1 call the contrast to mind for our new colleagues. Commissioner Merrifield and I  
2 went through this before. By the time we were at the peak of the license renewal  
3 we had relatively - I'm sure you're bringing newbies on, but for the most part we  
4 had a very stable work force and a very stable contractor work force. Here your  
5 ratios of experienced and inexperience are quite different from license renewal at  
6 its peak.

7 MR. LYONS: That's right. License renewal - let's be honest. Where  
8 we get the people that are experienced, they're from license renewal, which is  
9 really good because they have that good experience, but now they're developing  
10 their staff. We're developing our staff. We're sharing in how we're doing that, but  
11 the staff had to be split and now we're growing the two of them.

12 CHAIRMAN KLEIN: As Commissioner McGaffigan noted in the past  
13 we have a lot of opportunities for a lot of on-the-job training.

14 MR. LYONS: That's right. That's what we're trying to do.

15 MR. CLAYTON: We're taking advantage of that in our pre-application  
16 activities too. We're sending shadows along to learn how to do the job as well as  
17 people who are already experienced at it.

18 CHAIRMAN KLEIN: Obviously, we will have the same challenge with  
19 construction inspections as we start building.

20 MR. KANE: Absolutely.

21 COMMISSIONER JACZKO: I think Commissioner McGaffigan  
22 makes a good point, but I just want to clarify a little bit. We're not saying all the

1 new people we have are people who are inexperienced in environmental impact.  
2 Some of them have done them –

3 MR. LYONS: That's right. The people we're bringing in are coming  
4 from EPA. I'm bringing in people from State EPA or organizations from the Corps  
5 of Engineers. We've been able to get people that are experienced in the  
6 Environmental Impact Statement process that change thoughts a little bit, because  
7 we're not actually doing the projects. We're reviewing - it's from a regulatory  
8 standpoint, but they are certainly not neophytes to the system.

9 COMMISSIONER MERRIFIELD: The same would apply to our  
10 contractors.

11 MR. LYONS: Right. The contractors, too. They've been doing a lot.  
12 In fact, what we found is we're very popular out there in the Northwest for people  
13 that have been doing environmental reviews that are looking for places to latch on  
14 to. So the 150 that we will have more applicants there than we have openings for,  
15 which is good. We'll be able to get good people there.

16 MR. CLAYTON: I think it's probably less a challenge for the  
17 contractors because they're experienced at developing EISs. They're just not  
18 experienced at being regulators. They don't need to be. They just need to  
19 develop the EIS for us, but our people need to know how to be regulators as well.

20 MR. LYONS: In addition to the contract staff, we've put together a  
21 memorandum of understanding with US EPA and the Army Corps of Engineers to  
22 cooperate with us on radiological and water resource issues and provide expert

1 witnesses when we have hearings.

2 We also have fee-for-service contracts with the Army Corps of Engineers,  
3 U.S. Geological Society, and the National Oceanographic and Atmospheric  
4 Administration to help provide technical assistance in areas where we need help  
5 also.

6 The last bullet here is we're updating the environmental Standard Review  
7 Plan to reflect changes since the last update that was done in 1999. It was not as  
8 out of date as the Standard Review Plan that we used on the safety side.

9 We're updating it to include such things as the Commission's 2004 Policy  
10 Statement on Environmental Justice. NEI has put together guidance on severe  
11 accident mitigation alternatives and there's been other changes in laws,  
12 regulations, guidance and other standards that exist outside of the NRC and  
13 outside of our area such as EPA regulations and other environmental laws.

14 We also need to update the Standard Review Plan as Part 51 and Part 52  
15 rulemakings are finalized. We're incorporating the lessons we learned as part of  
16 the early site permit reviews and on the interactions we've been having with  
17 industry on the combined license generic issues that have been an ongoing  
18 system or process. Those changes we've been keeping up on the website as we  
19 go along.

20 In addition, having gone through the early site permit reviews we found that  
21 some of the sections are too detailed. They request too much information. Some  
22 of the references are obsolete, so we're cleaning all those up. We're working on

1 getting those done this summer.

2 But basically, everything that we're doing is already out there in the public  
3 and now we're just bringing it into the environment Standard Review Plan.

4 Another area that I'm particularly impressed with that we're working with  
5 PNNL is the Web portal that they are developing. This portal contains knowledge  
6 and Project Management tools to aid the staff and its contractors in the review of  
7 combined license applications. The portal is a central repository for all the staff's  
8 guidance documents, our checklists for our reviews and a repository for best  
9 practices that we identify as we go through each one of the reviews.

10 It includes a geographical information system that provides information to  
11 the reviewer from a variety of databases with the click of a mouse. They can go to  
12 a map of the United States, pick a site, bore right into it and draw information on  
13 that site. I'd be happy to give a demonstration either to the Commission or to their  
14 technical assistants at some time. I think it's very impressive, this whole portal  
15 system.

16 COMMISSIONER McGAFFIGAN: Mr. Chairman, can I just clarify?  
17 You said that you're working on this environmental Standard Review Plan update.  
18 Is there a disconnect between when you're going to have it ready and when the  
19 initial applicants are going to be applying, because I think Part 52 says you  
20 designed your application to the Standard Review Plan that's available six months  
21 before you apply?

22 MR. LYONS: That refers to NUREG 0800, the Safety Standard

1 Review Plan. This is NUREG 1555, which is separate. We've been working with  
2 industry all along to try and keep them up-to-date on the changes. We're not  
3 coming up with new positions. What we're trying to do is incorporate information  
4 that's already out there into one place.

5 If you look at the Review Standard 002 for early site permits, some of the  
6 work that we did there in the environmental work to identify how we were going to  
7 do our reviews for early site permits, that's being captured in here. What we're  
8 trying to do is collect and bring things together.

9 COMMISSIONER McGAFFIGAN: This rule that we'll be applying for  
10 the first time, 20.1406, I think I've got the right number, which says tell us what  
11 you're doing to minimize contamination, either by design or by strategies, whatever  
12 the right words are, is that part of your process or is that part of the SER process  
13 or is it one of these things that overlaps between the two of them?

14 MR. LYONS: I think it overlaps, but I think it's mostly in the safety  
15 side. That is really a safety issue that we address as part of the safety side. In my  
16 division, I also have those people who do that. I have the geologist and  
17 hydrologists that look on the safety side, also.

18 COMMISSIONER JACZKO: Just to follow up on that. The Standard  
19 Review Plan in this case plays a different role than certainly on the safety side,  
20 since the EIS is our product and not a licensee product. We have obligations to  
21 follow on what we develop for the EIS. The Standard Review Plan, as I  
22 understand it, I think is to provide guidance on the environmental report. Is that

1 correct?

2 MR. LYONS: And to the staff on its review and its development of  
3 the Environmental Impact Statement.

4 COMMISSIONER McGAFFIGAN: But ultimately the EIS is our  
5 responsibility.

6 MR. LYONS: It's our responsibility. It's our product. I think that's  
7 enough on the knowledge management system. Suffice it to say, that system  
8 helps us. I see I have a yellow light. I have a couple more slides. I hope to get  
9 through these.

10 The pre-application is a process that I'd really like to talk about just for a  
11 couple minutes. It's essential for us to complete the expected number of  
12 applications that are within our 24 month planning window that we're looking at.

13 These are voluntary activities that will lead to shared expectations with the  
14 applicant and the staff and it allows us to understand and align our reviews with  
15 where they are headed. It includes early vetting of technical and jurisdictional  
16 issues, obtaining the status of other authorizations the applicant is going to need  
17 and it helps us to understand the design and implementation of the applicants  
18 programs.

19 It also allows us to become familiar with the characteristics of the site that  
20 they selected and alternative sites and to begin to engage other stakeholders,  
21 including establishing relationships with other government agencies and to assess  
22 the completeness of their records and applications that are going to support their

1     submittal.

2             We have developed a scheduling strategy that identifies three cases, if you  
3     would, for the pre-application reviews. We created an idealized case that actually  
4     starts almost two years in advance of the application. That schedule of activities  
5     would be tied to their decision-making points so that we can be involved as they  
6     go along.

7             When they select their site, when they design their field programs, we can  
8     observe their data collection activities and any need for permits. I see that  
9     idealized case would have the most benefit for them because we'd be informed  
10    and involved all the way along.

11            COMMISSIONER McGAFFIGAN: Is there any applicant who exists  
12    that meets the idealize case?

13            MR. LYONS: There might be one or two that might.

14            COMMISSIONER McGAFFIGAN: Some of the later ones.

15            MR. LYONS: Comanche Peak, if they start engaging us now. We  
16    realize that's an idealized case. We developed a second case that would start  
17    about a year prior to the application. In that case the site would already be  
18    selected so we wouldn't be involved in that, but we would be able to get out and  
19    look at the alternative sites. We'll be able to observe their data collection systems,  
20    our processes and systems, and become familiar with their products and make  
21    sure that they were doing everything they need to get ready.

22            Actually, we realized the reality of the situation now, especially because of

1 the continuing resolution. We held off starting these pre application activities. We  
2 wanted to start probably December/January time frame and like I said, today is the  
3 first time we're actually out in the field.

4 We've modified that so we can go out and become familiar with their site.  
5 We probably won't go to the alternative sites. We'll be able to do some records  
6 reviews and make sure that their application is going to hit the mark so that when it  
7 comes in we can hit the ground running and move on out.

8 As I said before, we have two teams out this week. We're going to  
9 Bellefonte and to Summer; we're going to Lee Station and Shearon Harris in May;  
10 and to South Texas in June. We've been working through the design centered  
11 working groups to roll out this process and to let the people know that what we are  
12 doing, how we're expecting it.

13 We set up a schedule to where we're going to have up to four teams going  
14 out to two sites each week; about every three or four weeks we would have  
15 opportunity for this. So there will be plenty of opportunities for us to have these  
16 pre-application activities done.

17 COMMISSIONER MERRIFIELD: Just to clarify. Given the difficulties  
18 we went through with the Continuing Resolution you outlined sort of the three  
19 scenarios, the last one being more of a compressed focused effort. Given the list  
20 you have here on Slide 14 and what we're looking toward receiving COL  
21 applications later on in this calendar year, would I take it then that these folks are  
22 principally focused on that compressed time line?

1 MR. LYONS: I think so. Brent has been rolling this process out. He  
2 can probably talk a little bit about the fact that what we've done is offered up where  
3 we have scheduled points and have asked people to identify when they want us to  
4 come out. We have to go out when they're ready, when they're doing the right  
5 things. We're trying to provide them opportunities.

6 CHAIRMAN KLEIN: Just a clarifying question. If you look at a case  
7 like South Texas, their site obviously already exists. I assume you don't spend  
8 much time looking at alternative sites, do you?

9 MR. CLAYTON: South Texas is so near on the horizon we won't  
10 have time to look at the alternative sites for them. We probably would, if they had  
11 come in a year ago we would have time to go look at the alternate sites.

12 MR. LYONS: But they do still have to identify alternative sites from  
13 the one they picked and show why there's no obviously superior site to the one  
14 they selected. That's part of the process, part of the alternatives review that we  
15 do. We try to limit the number of sites that we look at and we've done that through  
16 our guidance documents of how we do that.

17 CHAIRMAN KLEIN: I'm just sort of curious. That cooling lake, they're  
18 not going to move that. So they're somewhat limited on alternative sites, I would  
19 think.

20 MR. CLAYTON: They can select other alternative sites elsewhere in  
21 the State or elsewhere in the geographical region. It doesn't have to be at that  
22 same cooling facility.

1                   CHAIRMAN KLEIN: So if they want to be silly and pick something  
2 they have never done before, they can do that?

3                   MR. LYONS: That's true. They have to show that within their span of  
4 control that they have - of a reasonable span of control I should say - that there  
5 are no sites that are obviously superior to the one they have chosen. Obviously,  
6 the fact that there's a facility there, the fact that there's a cooling pond there would  
7 make that site maybe rise it up.

8                   CHAIRMAN KLEIN: One would think so.

9                   COMMISSIONER McGAFFIGAN: Transmission lines. A place that  
10 doesn't have any at the moment, that may be a problem. Just so - the vocabulary  
11 that is compressed, he didn't get to truncated yet?

12                  MR. LYONS: Truncated - I think that's what we've -

13                  MR. CLAYTON: That's where we are on all these sites that are  
14 coming in later this year.

15                  MR. LYONS: We're looking at about a six month review on those.

16                  MR. CLAYTON: To get back to your question, Commissioner  
17 Merrifield. We are in that stage here, but if you look at the idealized case, we  
18 would have six or seven interactions with the licensee over a two-year period. In a  
19 truncated case we're probably going have two interactions because we just don't  
20 have time to go out and do everything. We're trying to combine some of those  
21 activities that we would have done over a more leisurely time period into a more  
22 compressed time period.

1                   COMMISSIONER MERRIFIELD: Just to put a fine point on that, the  
2 scope of activities you will have under the truncated case is the same scope.  
3 You're just doing it in different pacing?

4                   MR. LYONS: We'll do a smaller scope. Either in the compressed or  
5 idealized place, we would actually go out and send teams to the alternate sites  
6 that were identified and try and get information.

7                   COMMISSIONER MERRIFIELD: Let me rephrase the question. The  
8 activities necessary for us to meet our requirements under the National  
9 Environmental Policy Act will be met in any one of the three cases?

10                  MR. LYONS: That's right. It's a timing issue. You're right. This  
11 scope, we will still go do the same things, but we'll do them after we get the  
12 application rather than before we get the application. We'll have to do those - I  
13 thought you meant in the pre-application. The pre-application activities would be  
14 the same scope. The scope is the same; it's whether we do it prior to or after the  
15 application.

16                  COMMISSIONER MERRIFIELD: Right. So by undertaking the  
17 truncated case, we're losing some of the opportunities to get more of this work  
18 completed up front and thus we'll have to do it more concurrent with the COL  
19 application.

20                  MR. LYONS: Yes, to gain that information and understand and  
21 whether or not we have a high confidence that the application is going to meet our  
22 requirements, that it's going to be high quality.

1                   COMMISSIONER McGAFFIGAN: The area that most worries me  
2 speaking as a single Commissioner is whether all the State permits from the ABC  
3 acts that play differently, depending on the site, whether you have confidence that  
4 they've got all the State permits in line or not. Under your idealized case, we'll  
5 know by the day they apply. Under the truncated case, you'll have less  
6 information.

7                   MR. LYONS: That's right.

8                   MR. CLAYTON: At least we'll get an understanding were there at in  
9 the process.

10                  COMMISSIONER MERRIFIELD: The clear message that our  
11 licensees should take away from this is the sooner they engage with our staff and  
12 preferably in the idealized case, the greater likelihood that we will be able to  
13 perceive through their COL application any king of timeliness that they are  
14 expecting.

15                  MR. CLAYTON: I think Bill Borchardt mentioned the Licensing  
16 Program Plan, the LPP, where we're scheduling out all our resources. What we  
17 expect to be able to do after we have some of these pre-application activities is to  
18 build a schedule for each specific site based on what we know so we can pick up  
19 whatever deficiencies we can on that site.

20                  COMMISSIONER McGAFFIGAN: In terms of interacting with DHS  
21 and when they come in, we deal with emergency planning in the environmental  
22 side. Is that right? Or is it both?

1 MR. LYONS: It's in both.

2 COMMISSIONER McGAFFIGAN: Depending on your schedule,  
3 you'll then be able to tell DHS when the optimum time for them to complete their  
4 work is.

5 MR. LYONS: Yes. Even in these pre-application activities we will try  
6 to identify if there's the right opportunity to bring DHS, FEMA in and be part of  
7 those, too. We're not going to be just holding it to ourselves. We try to throw  
8 broad net when we do those to get everybody involved.

9 The other thing we want to do is when we go to a site we want to take the  
10 people that need to be at the site and not burden the potential applicants or an  
11 applicant with multiple teams coming that cover almost the same area at different  
12 times. We're trying to keep everybody together.

13 We're trying to coordinate all of our visits so that when we go we talk with  
14 the right people and the mayor doesn't get 12 different people coming by to see  
15 him at six different times. I know I'm way over.

16 COMMISSIONER McGAFFIGAN: That's our fault, not yours.

17 MR. LYONS: I guess finally I see some challenges ahead.

18 Obviously, the first is to hire and train our staff and contractors. We've talked  
19 about that in order to be able to do this. Obviously, here in headquarters we're  
20 going to need the space to bring those people in.

21 Office of Administration through HR has helped us bring people in. They're  
22 working with us on consolidating us into one place so that it's easier for us to

1 incorporate this new staff into our regular staff.

2           Secondly, we're going to have changes Part 52, especially regarding  
3 Limited Work Authorizations. They're going to change the way we conduct our  
4 environmental reviews. We need to update our guidance documents to reflect  
5 those changes. That's something that we really didn't budget for this year or next.  
6 We'll have to look for ways to get that done.

7           And finally, since the environmental review is so heavily leveraged in the  
8 use of contractors, we need to be able to withstand another continuing resolution  
9 so that we can work through those issues. We're trying to work ways out so that  
10 we can do that.

11           We found that in the case of Vogtle when we had to stop the contractors  
12 working for a little over 30 days. When we got restarted up a few of those  
13 contractors weren't immediately available, but I think we're able to bring them on.  
14 We still have this issue that Bill brought up about the RAIs and getting all those  
15 completed.

16           So, in summary, the staff is responsible as we pointed out before for  
17 preparing the Environmental Impact Statement to fulfill our responsibilities under  
18 NEPA. My staff has done a lot to prepare for this new wave of applications that  
19 we expect in the next year or two.

20           We're taking the lessons learned from the license renewal and from the  
21 early site permit process to improve our process. The pre-applications reviews are  
22 going to allow us to get out there and understand what the applicant is doing and

1 to be ready and we're developing the tools we need through our web portal at  
2 PNNL to allow us to conduct these efficiently and also to continuously look for  
3 improvements in the process so that we can continuously update it. With that I  
4 thank you. I'm sorry I went over.

5 MR. KANE: That concludes the staff's presentation. I'd just like to  
6 make a few comments. We're very proud of what we've done so far in terms of  
7 standing up the new organization and staffing it. We recognize there's a lot of  
8 work to be done and we recognize the challenges before us. Thank you.

9 CHAIRMAN KLEIN: Thank you for a very informative presentation  
10 and I hope your comment on Slide 15 about the continuity of funding that we don't  
11 have such challenges on the continuing resolution as we had this year. I think this  
12 was a little unusual, so hopefully in the future we won't have one quite as  
13 challenging as this one was.

14 In honor of having our only environmental lawyer on the Commission, we'll  
15 start our questioning with Commissioner Merrifield.

16 COMMISSIONER MERRIFIELD: There's obviously a nexus between  
17 the work undertaken in the environmental review and the work undertaken in the  
18 technical review associated with the COL application. Obviously, that nexus  
19 needs to be well considered.

20 Have you considered the extent to which, if for example, the technical  
21 review may be slowing down a bit, do you have a process that will allow the  
22 environmental review to continue at its own natural pace and not be held back by

1 the technical review to the extent possible?

2 MR. LYONS: Yes. I have my own environmental project managers.  
3 We set up our own schedule. We feed the licensing project plan that keeps track  
4 of the whole schedule, but we really do have the ability to continue forward if the  
5 safety review is slowed down. We can do that.

6 COMMISSIONER MERRIFIELD: That makes a lot of sense. In  
7 terms of the - there's a lot of different actions that the staff has to consider, some  
8 of which fall into a policy perspective. Some of these issues can rise to a level  
9 where there are matters that would have to be considered by the Atomic Safety  
10 and Licensing Board, either as a portion of a contested proceeding or as it relates  
11 to a mandatory proceeding; aircraft impacts, the validity of having permanent  
12 storage options, things of this nature.

13 Has the staff considered the possibility of seeking approval from the  
14 Commission for the Commission to take various issues potentially off the table for  
15 consideration in that process? Is that something you all have thought about at all?

16 MR. LYONS: I think we thought about it a little bit. I don't think at this  
17 point - there's a couple of rulemakings that have been considered in the past and  
18 because of priorities haven't gone forward, such as transportation.

19 In Part 51 there's Tables S3 and S4; one is transportation and one has to  
20 do with the fuel cycle. So some of those need to be updated. They've been a  
21 lower priority, again, because we didn't see applications on the horizon when they  
22 were done. There are issues. We will continue to look for issues to where we can

1 do that, to where we can raise things up and be addressed in a policy manner so  
2 that we don't have to treat them each time. Bill, if you have -

3 MR. BORCHARDT: We have received input from some stakeholders  
4 to try to do some generic rulemakings and address some issues on a generic  
5 basis. I think that idea holds great merit. We haven't explored that and certainly  
6 haven't budgeted for that activity in the near term.

7 COMMISSIONER MERRIFIELD: Mr. Chairman, I think that's an  
8 issue that may require considered attention on the part of the Commission  
9 because if there are issues that we can deal with in a generic way using our full  
10 authority as a Commission and eliminate a series of boards or series of staff  
11 panels having to look at those potentially different and inconsistent results, I think  
12 there's some great value that can be considered.

13 CHAIRMAN KLEIN: I think that would be very helpful. If you could  
14 identify those and let the Commission know, it would certainly help I think  
15 everyone so we don't have to reinvent the wheel over and over again.

16 COMMISSIONER McGAFFIGAN: I might just add that's been our  
17 philosophy since 2005 in other areas. We've been trying to get rules fixed so that  
18 we have generic resolutions of issues and Part 52 is part of that.

19 COMMISSIONER MERRIFIELD: That's exactly right. You talk a lot  
20 about the effort that we have to obtain the appropriate contractors and our  
21 deployment of those contractors early to take a look at these sites which makes a  
22 lot of sense. One of the concerns I may have is the extent to which we become

1 contractor driven.

2 I recognize we have a core of folks who manage those contractors. We  
3 have our in-house expertise and we rely on contractors to do a lot of the footwork  
4 and the person work in order to come up with the EIS materials themselves.

5 What's our comfort level to the degree that we're driven by a process that  
6 we feel is appropriate versus driven by a process where our contractors can meet  
7 deadlines?

8 Is our time table driven by what we think our contractors can meet or have  
9 we crafted a timetable we think is right and we're obtaining the contractors  
10 necessary to fulfill it? I'm hoping it's the latter.

11 MR. LYONS: It's the latter. We've tried to develop a process that we  
12 think is the appropriate process and get the contractors that we need to meet  
13 those processes, those time frames. Our process does allow for some flexibility,  
14 especially when we're starting to look at 12 or more of these applications at a time  
15 to limit the size of the contractor force so that we don't have 400 people working at  
16 the same time.

17 It's hard for the staff to coordinate and oversee that many contractors.  
18 There's certain limitations to what the staff can appropriately have oversight for in  
19 a contract area.

20 We'll be using some of the same resources on multiple reviews and we  
21 need some flexibility to move them back and forth, just like you would with the  
22 staff. We're trying to get ourselves through this bow wave. If we get beyond this

1 bow wave and there's some levelization of the number of applications that are  
2 going to come in for an extended period of time then we can build up the staff to  
3 do that. I think you've seen that in the license renewal area.

4 COMMISSIONER MERRIFIELD: I have one more I want to get in.  
5 My point being I want to make sure we have the right process and allow that to  
6 drive contractors.

7 MR. BORCHARDT: It goes well beyond environmental.

8 COMMISSIONER MERRIFIELD: I understand. The last question is  
9 the issue of - and this relates a little bit to the issues of the hearing process. I  
10 guess I may want to have Steve weigh in on this if he has some thoughts as well.

11 There are various theories out there about the point at which we want to  
12 begin consideration in a contested proceeding, whether we would allow those  
13 issues to be focused on a draft EIS and potentially a draft safety analysis review or  
14 whether we would follow the traditional process that we have right now that takes  
15 those a little later in the process but allows them to be resolved more  
16 straightforward the first time.

17 I don't know if you all have some thoughts you want to share on the timing  
18 of when we ought to be beginning that process or any alternatives. Steve, do you  
19 want to take that?

20 MR. BURNS: The Commission's rules right now talk about going to  
21 hearing on environmental statement after the environmental statement has been  
22 issued by the staff in both in Part 51 and in Part 2 - I think it's 2.332. I'm not sure

1 we've done an extensive study in our office of it and sort of going back and forth  
2 it's not entirely clear to us that there are a lot of the efficiencies that you would get.

3 You might get some, but then you do have to account for the ultimate  
4 decisional process of providing the EIS to the Environmental Protection Agency  
5 and the timing of that.

6 I recognize that I think there's something pending before the Commission  
7 now in Vogtle on whether - the Commission has the power to set the processes.  
8 This is not so much NEPA driven. It's NEPA driven in the gross sense, in the  
9 larger sense, but it's not in terms of how the Commission adapts its rules to  
10 comply with NEPA. It's discretion.

11 There might be some benefits, but I think we've still seen you would have in  
12 terms of interactions and late interactions where you have for example, now you  
13 have an EIS is one area where the rule speaks specifically to the potential for late  
14 file contentions because the EIS is the agency product, not the application that you  
15 would get.

16 I'm not sure that you would necessarily completely eliminate those. It's sort  
17 of a non-answer, perhaps. I think we haven't seen a lot of clear benefits for it.

18 COMMISSIONER MERRIFIELD: You all want to chip in on that?

19 MR. LYONS: I think from a practical matter, you may be taking  
20 resources off of the development of the final Environmental Impact Statement to  
21 address the hearing so that it could end up delaying the final Environmental  
22 Impact Statement. That's my only concern.

1 Plus, we can address the issues that are raised as part of the contentions in  
2 our final Environmental Impact Statement so that we can try to resolve -

3 COMMISSIONER MERRIFIELD: In essence, you're saying from the  
4 standpoint of managing your environmental staff, you think it's more efficient to  
5 hold those issues until after the EIS is completed rather than taking those folks off  
6 of that process of completion and having them address those issues in mid-  
7 course?

8 MR. LYONS: Right. When we develop our plan, we allow for the  
9 time and have those resources available in the hearing process portion at the end  
10 of the process. It may be in the final outcome that the whole schedule ends up  
11 being about the same, but it may push back the final Environmental Impact  
12 Statement. I'm not really sure. It all depends on the contentions and those things.

13 MR. CLAYTON: One other complication I see too is if we resolve an  
14 issue using the draft Environmental Impact Statement and then we get significant  
15 comments in that area and revise the final Environmental Impact Statement, I'm  
16 not sure how that all plays out.

17 COMMISSIONER MERRIFIELD: Okay. Mr. Chairman, the only thing  
18 that sort of comes out of this is there are I think as is pointed out by the staff in this  
19 instance, and they made comments earlier on mandatory the proceeding, the staff  
20 envisions significant resources to be deployed to deal with both the contested  
21 proceedings if they occur and with the mandatory proceedings.

22 I think that's something the Commission certainly will need to continue to

1 take a look at as it reviews the appropriateness of how we conduct ourselves,  
2 particularly as it relates to mandatory proceedings. Thank you.

3 CHAIRMAN KLEIN: Commissioner Jaczko?

4 COMMISSIONER JACZKO: Just to follow up on Brent's point about  
5 the draft EIS. I think it's an important one, our staff will be potentially testifying at  
6 hearings and making statements in a quasi judicial process.

7 I think it's important that the statements they are making are accurate and  
8 we do run into a situation if we resolve an issue at the draft and have staff testify  
9 and that additional comments come in that creates a bit of a challenge then for the  
10 things that our staff has said.

11 I think, Jim, you made the point several times in your presentation the draft  
12 EIS is not draft in the sense of a draft SER. It has information -- portions that need  
13 to be fleshed down and worked on. It is draft in the sense that the staff has looked  
14 at the information, provided a preliminary judgment waiting for the process to go  
15 forward in the public comment period and to incorporate new and additional  
16 information through that process. So it does create a much different situation than  
17 the draft safety document.

18 I wanted to ask the question. This goes back to something, Bill, you said  
19 very early on. We left you out of most of this discussion. I thought I would ask you  
20 a question. You talked about design acceptance criteria and made a statement  
21 that there's three ways to resolve them.

22 The first one I didn't write down. The second one I think you said was

1 during the licensing for the COL. The third was during construction. I think I  
2 understand design acceptance criteria and I thought I understood the resolution on  
3 the first two issues, but I'm not clear what you meant by the third way to resolve  
4 those during construction.

5 MR. BORCHARDT: Design acceptance criteria are created because  
6 the final design doesn't exist at the time of the design certification rule. The staff  
7 and the applicant agreed on some criteria that if satisfied would result in an  
8 acceptable design.

9 The third option that I discussed is that we can continue down that path,  
10 issue the combined license because we have the ITAAC which addressed these  
11 design issues and then the combined license holder has the final design  
12 developed and actually constructed.

13 So now you end up with an as built configuration. You would check that  
14 against the acceptance criteria that had been previously agreed to and that will  
15 provide resolution. As long as they satisfy the acceptance criteria, there is no  
16 issue left for debate. That's the whole premise of ITAAC.

17 COMMISSIONER JACZKO: Essentially, they are ITAAC embedded  
18 within the design certification to some extent the design acceptance criteria?

19 MR. BORCHARDT: That's exactly right. That final scenario, though,  
20 does not provide any issue preclusion for any separate combined license  
21 application or for any other application referencing that design. This is a site  
22 specific, unique completion of those ITAAC or design acceptance criteria which

1 then leads to the challenge of standardization.

2 COMMISSIONER JACZKO: It does seem a little bit contrary to what  
3 - It does seem to be a little bit more kind of a Part 50 model, rather than licensing  
4 everything up front, having the design fixed and finalized and then checking the  
5 construction through the ITAAC. We're still in a little bit of a place of allowing  
6 design modifications throughout construction. It does seem to be not the direction  
7 we intended to go with Part 52.

8 I'm a little bit surprised to hear that that's an option on the table at this point.

9 MR. BORCHARDT: My way of thinking is that Part 52 enables  
10 standardization, it doesn't mandate it.

11 COMMISSIONER JACZKO: Even from the standpoint of  
12 standardization or no standardization, it's potential that you not have a finalized  
13 design after you had licensed the facility. That seems to me what I'm hearing.  
14 That seems to be contrary not to the standardization intent of Part 52, but contrary  
15 to the licensing to - it's unclear to me what exactly we're licensing at that point.

16 MR. BORCHARDT: This is a difficult concept because at the highest  
17 level Part 52 sounds very simple. In reality, as we did the early design certification  
18 rules, there wasn't all that design information and in fact we created design  
19 acceptance criteria as a way to still allow us to make a safety finding that allowed  
20 us to certify a design without that detailed design information.

21 I think - I don't want to speak for the industry - but from the staff's  
22 perspective we would have been more than happy to have never had to create

1 design acceptance criteria.

2 COMMISSIONER JACZKO: I guess I perhaps share - based on  
3 some of the discussions - share some of that sentiment. I don't have much more  
4 time. I hope that we'll have another round of questions. I have several questions  
5 on the environmental front, but I can try and squeeze one in now or save them for  
6 another round.

7 CHAIRMAN KLEIN: We'll try another round.

8 COMMISSIONER McGAFFIGAN: Can I just follow up on the design  
9 acceptance criteria for the AP1000 and the ABWR? How many of them lend  
10 themselves to being resolved at the COL stage? How many lend themselves -  
11 have you looked at that?

12 MR. BORCHARDT: I'd have to take a look at that.

13 COMMISSIONER McGAFFIGAN: How many design acceptance  
14 criteria are there for those two plants? Do you know how many are embedded in  
15 the certified -

16 MR. BORCHARDT: Amy always comes to the rescue.

17 MS. CUBBAGE: Amy Cubbage again. On ABWR, it was certified  
18 with DAC in the piping area, digital I&C, human factors control room design, and  
19 also to a limited extent in radiation protection area, but that wasn't a very clear  
20 application. On AP600, it was limited to digital I&C and human factors. On  
21 AP1000, there was piping, I&C, human factors and then currently on ESBWR  
22 there is also a proposal that there be digital I&C, human factors, and piping and

1 we're hoping that the piping issues can be closed ultimately before we certify, but  
2 there's a timing issue with all the design work that is involved with that process.

3 COMMISSIONER McGAFFIGAN: Can I ask the expert how much of  
4 that can be done during the COL proceedings using the design centered  
5 approach?

6 MS. CUBBAGE: I think piping is a very likely candidate. I think there  
7 are issues that are ongoing with I&C and human factors that make the timing of it  
8 problematic. I think it's not likely that any of the near term applicants would be  
9 able to come in with a complete digital I&C system down to all the software  
10 development, implementation and a control room design. Perhaps on the ABWR it  
11 could be done because those plants are built and operating overseas.

12 CHAIRMAN KLEIN: Commissioner Lyons?

13 COMMISSIONER LYONS: Let me start with compliments to the  
14 team that made this presentation. I think it's as and a very, very solid briefing to  
15 the Commission. Also my congratulations on the issuance of the two ESPs.  
16 That's certainly a very, very important milestone. That also raises a question in  
17 my mind.

18 I had kind of assumed that having seen successful demonstrations on the  
19 ESP and presumably then the applicants realizing significant benefits from the  
20 ESP process, that we would see more potential applicants following the original  
21 envisioned process in Part 52 to go the ESP route. And in fact with the exception  
22 of Vogtle, there is very few who are talking about the ESP route.

1 I'm curious what lessons there are for this, for us in this. I'm wondering if  
2 there are less benefits from the ESP process than we envision. If there's changes  
3 in the ESP process that could lead to more applicants being willing to go that  
4 route. I'm interested in your comments.

5 MR. BORCHARDT: From my perspective, the benefits of an early  
6 site permit of whether or not you go forward with an early site permit depends on  
7 when you intend to come in for a combined license and when you intend to begin  
8 construction.

9 If you are, as much of the industry seems to be, in high level of interest in  
10 getting electricity on the grid in 2015 or thereabouts, then there is reduced benefit  
11 to having an early site permit. If you just come in for a combined license  
12 application, all the same issues get reviewed. They all get resolved. It's just it's  
13 part of the combined license

14 COMMISSIONER MERRIFIELD: There's no savings.

15 MR. BORCHARDT: If, however, you had a site but were not in that  
16 2015 deadline to get electricity on the grid, then it would make good sense  
17 because it identifies issues. It gives you some issue preclusion and it sets aside  
18 that site using some plant parameter envelope that you could now fit a design into.  
19 A lot of the work now has been done. It's behind you. That would be the benefit  
20 from my perspective.

21 COMMISSIONER MERRIFIELD: I think there is a value, particularly  
22 if you have a greenfield site they may want to use sometime down the road, but

1 haven't made a commitment to build a reactor on. With a pre-existing site, there's  
2 less benefit if there's a greater, as Bill puts it, a greater commitment to actually go  
3 ahead and submit a COL.

4 COMMISSIONER LYONS: As you're describing it then, it's not really  
5 a weakness or a flaw in the ESP process that leads more folks to go without the  
6 ESP process. It's more whatever their own particular time line is and particular  
7 motivations.

8 MR. BORCHARDT: I believe so.

9 MR. KANE: The more recent announcements that Bill alluded to  
10 earlier take into consideration getting the site approved first and then matching  
11 that up with a design.

12 COMMISSIONER LYONS: Switching gears, I have been a great fan  
13 of standardization. The whole Commission has been a great supporter of  
14 standardization, a great supporter of the design centered review approach. But  
15 back when we started talking about this I thought we had three designs. Now, we  
16 have moved up to five designs.

17 I'm just curious if you see more shoes that may be dropping with still more  
18 designs. I can imagine other designs that are at least considered around world. Is  
19 there any hint that utilities are going to be - I don't know what the right word is -  
20 induced, enticed, to bring still another new design to the table and at least in my  
21 mind each time this happens the focus of the Commission and I'd say the industry  
22 on standardization is at best diluted.

1           Are there other shoes that we are hearing rumors may drop? I realize you  
2 can't probably give designs.

3           COMMISSIONER MERRIFIELD: It could be worse. There are  
4 actually two that people forget. We also approved the System 80 Plus and the  
5 Westinghouse AP600. So, technically, you could talk about seven rather than five.

6           COMMISSIONER LYONS: When we started this process I thought  
7 were talking about three. Now we're up to five and I'm wondering where we're  
8 going.

9           MR. BORCHARDT: For the category that industry would call  
10 Generation Three Plus, the evolutionary designs, I believe we now know all of the  
11 designs that will be coming before us, leaving aside the Generation Four projects  
12 that are beyond 2020 in my mind.

13           For all the applications that we'll receive over the next five to eight years, I  
14 think we know what they all are now with the recent addition of Mitsubishi.

15           COMMISSIONER LYONS: I very, very much hope you are correct.

16           MR. KANE: We haven't heard anything more in the EDOs office.

17           COMMISSIONER LYONS: Okay. I'll look for to another round with a  
18 quick question or two.

19           CHAIRMAN KLEIN: I'd like to follow up on Commissioner Lyons'  
20 comments on standardization. I, too, thought that it would be a smaller number  
21 than we're seeing. In light of that with the lessons learned on the ESBWR and all  
22 the RAIs and so forth, what are you doing for MHI?

1 MR. BORCHARDT: Well, our activities with them have been fairly  
2 limited up to this date. We're just engaged in pre-application review work. That  
3 work we believe will be able to increase still at a fairly modest level because as I  
4 mentioned earlier, we're just going to take resources that are freed up from  
5 schedule slips or hope for efficiencies and apply those.

6 I would still think we're still in the order of magnitude of a few FTEs for  
7 Mitsubishi design pre-application work. We'll continue with that through the fiscal  
8 year 2008. It will be in the budget. It is in the budget for 2009.

9 CHAIRMAN KLEIN: Do you think your process has been articulated  
10 more clearly so that you will not have as many RAIs that you saw in the ESBWR?

11 MR. BORCHARDT: The industry is paying very close attention to  
12 the progress and activities on other designs and other reviews. There's a lot of  
13 working groups set up within the industry and a lot of sharing of information. So I  
14 believe they're learning lessons.

15 Just the creation of the new office has allowed the NRC to be far more  
16 proactive in its communication. We're really ramping up our outreach activities,  
17 not just to individual applicants or potential applicants, but to all kinds of industry  
18 groups in different fora so that we can put out those messages to help improve the  
19 new or incoming applications. The Standard Review Plan being updated is a  
20 tremendous help as well as the rest of our internal guidance that we make public.

21 CHAIRMAN KLEIN: Before the next question, I'd just like to follow  
22 up with a comment that Commissioner Merrifield made and that is that the

1 environmental issues are not delayed from the safety issues; that we can keep  
2 moving both of those on track so that the environmental issues are not held up. I  
3 think that's a very important concept.

4 COMMISSIONER MERRIFIELD: And vice versa.

5 CHAIRMAN KLEIN: Right. In terms of lessons implemented, I don't  
6 know if this is a Bill question or a Jim question. If you look at the grand scheme of  
7 early site permits and you look at what you've done on Vogtle compared to the first  
8 three early site permits, can you talk about the schedule, the time it took for the  
9 first three verses what you expect for the fourth?

10 MR. LYONS: With Vogtle, we're working toward a 21 month review  
11 schedule. We've already kind of lost a month because of the continuing resolution  
12 and we may lose a little bit more.

13 If you look at the first three, I think the best we did was around 30 months.  
14 What we're trying to do is implement those lessons to bring us down and to get us  
15 within that 24 months. The 24 month is again a planning tool, a planning wedge, if  
16 you would for us along with the pre-application work we do and the more extensive  
17 acceptance review.

18 We plan to get a better schedule and actually lay out and have individual  
19 schedules for each one depending on where we see significant issues that need to  
20 be addressed or not, where we see a high quality complete application that's going  
21 to allow us to do it quicker.

22 CHAIRMAN KLEIN: I think one of the things that Commissioner

1 Lyons had brought up and Bill commented on the fact of why we're not seeing  
2 more early site permits, but I think if we demonstrate continued efficiency in terms  
3 of making our expectations clear, high-quality applications come in, then it might  
4 change on future plans on those utilities that might want to look at an early site  
5 permit.

6 I think that's why lessons implemented are important so that we can  
7 demonstrate efficiencies that might break those systems up so there would be  
8 advantageous, advantages to coming in.

9 MR. LYONS: From the environmental standpoint, our review really  
10 doesn't matter whether it's an early site permit or COL. In the early site permit  
11 there's a few areas we don't address because obviously we're not to that point.  
12 For the main process that we use, we use basically the same process and deal  
13 with those issues that we can deal with at that time.

14 COMMISSIONER MERRIFIELD: Mr. Chairman, having taken a little  
15 bit of a look at this, thinking about where licensing may be coming from in this. If  
16 you go through separate environmental early site permit process and then come in  
17 for COL you're subjecting yourselves to potentially duplicative reviews.

18 There's an additional cost that goes with that. There is also if you're a  
19 licensee and from our perspective as well, there is an initial hearing process built  
20 in. If I know as an applicant that I want to build a plant, there's not a lot of  
21 additional value you can imagine by having to put yourself through that process  
22 twice and perhaps additional hearing processes when all of that is going to be

1 covered within the context of the COL application.

2 MR. KANE: What's interesting and Jim may comment on it, the first  
3 three early site permits were technology independent, where as Vogtle will be  
4 focused on a specific design. Going forward, I don't know, I would expect, though,  
5 that it would be tied to a particular design. But Jim might have some comments on  
6 the differences between those two types of reviews.

7 MR. LYONS: It's more efficient for us to look at a given design, a  
8 specific design on a given site then to look at the plant parameter envelope where  
9 we're trying to understand does this make sense. Explaining to the hearing board  
10 why the source terms for the ABWR was representative enough to cover all the  
11 other designs. If you knew that you were going to build an ABWR, there's no  
12 question there so don't even have to address that. You just say this is what it is  
13 and it's okay or not okay.

14 COMMISSIONER MERRIFIELD: If you go back to the Energy Policy  
15 Act of 1992 and you look at what Congress was attempting to achieve at that  
16 point. What it was attempting to do was set up a system to encourage utilities to  
17 want to move forward toward the process of ordering new nuclear power plants.

18 The early site permit process was one of the pieces they put in there that  
19 would allow a licensee to dip their toe into the water to pursue the possibility of a  
20 site without making the full commitment toward actually ordering a reactor at a  
21 given site.

22 If Congress wanted to keep things moving and for our purposes both the

1 design review process and early site permit process allowed us to hone or  
2 continue our capabilities without their having made that decision. The Energy  
3 Policy Act of 2005 low and behold everything is completely different. Now we  
4 have real people who want to come in for real reactors and the tool is different for  
5 a different period of time.

6 CHAIRMAN KLEIN: I think that's a good point. I think rather than  
7 what we're seeing now rather than dipping toes in the water, everybody is jumping  
8 in. It probably changes the parameters. Commissioner McGaffigan?

9 COMMISSIONER McGAFFIGAN: Thank you. I'll use my own time  
10 for this comment. I think the likelihood of getting additional ESP applications  
11 depends on how we do on Vogtle. The first three applicants were being heavily  
12 subsidized by the Department of Energy, at least one of them has no immediate  
13 intention, Clinton, to site anything.

14 I think the plant parameter envelope concept - I agree with Bill - is not  
15 exactly conducive to efficiency. I would think in the future people will choose a  
16 technology and it will be technology specific and a lot more things will get resolved  
17 as opposed to be left to the COL process.

18 It all depends on how we do on Vogtle. It depends on how that process  
19 works and whether indeed Vogtle benefits in its COLI application from having  
20 started the ESP process early. That's my perspective on it. Vogel's the first ESP  
21 applicant not subsidized by the Department of Energy. It's a real one.

22 MR. KANE: And the first site technology unique.

1                   COMMISSIONER McGAFFIGAN: Right. You're dealing with a real  
2 applicant as opposed to people who are willing to be subsidized by DOE to  
3 potentially do applications down the road. I've asked a lot of questions, clarifying  
4 questions, and I may give up some of my time.

5                   The question I want to ask - no one could listen to this briefing today and  
6 not realize that there is just a tremendous work control aspect to this. We're going  
7 to be dealing with this issue in real time. We're going to discover that Applicant X  
8 maybe really doesn't have his border permits in a row and maybe there's some  
9 other problems.

10                  Maybe Applicant X deserves to be shuffled a bit. How are you with 12 or so  
11 applications simultaneously being considered, how do you plan to manage the  
12 ongoing real time prioritization of all of this? I guess that goes to the boss,  
13 Mr. Borchardt.

14                  MR. BORCHARDT: We have in development what we're calling the  
15 licensing program plan which is an integrated schedule for all reviews which  
16 assigns work down to the reviewer, individual reviewer level, for any activity.

17                  COMMISSIONER McGAFFIGAN: How does that get adjusted based  
18 on reality as opposed to plans?

19                  MR. BORCHARDT: It's a process and a program that allows us to  
20 update continuously based upon the performance of the applicant and the staff so  
21 that if we discover that there is an issue that's going to take longer to resolve on  
22 Application A because we had our resources loaded for all seven applications at

1 the same time, what we can do is go in and adjust the due dates on "A" and see  
2 what impact it will have on all the others.

3 We'll be able to shift that reviewer from "A" to some other review in order to  
4 try and stay on the most efficient schedule we can looking at the biggest picture  
5 from the agency perspective.

6 COMMISSIONER McGAFFIGAN: Speaking as one Commissioner, I  
7 want to be able to reward the folks who do good applications at the expense of  
8 people who do not so hot applications and leave lots of issues to be resolved.

9 MR. BORCHARDT: The important point we're putting out to the  
10 industry now is that a one week delay caused by the applicant might result in  
11 much more than a one week delay in their final output because we're not going to  
12 let our resources sit idle waiting for the late application information to come in.

13 We're going to apply them to wherever they can do meaningful work right  
14 away. The next time they have access to that reviewer might be longer than the  
15 delay that they caused providing the information.

16 COMMISSIONER McGAFFIGAN: One final clarification. If you have  
17 an issue that's being dealt with in both the SER and the EIS and you have this I  
18 play, does the SER get issued with open items in that area or do you try to - the  
19 discussion earlier about how to not have the SER hold up the EIS or vice versa  
20 seems to me like it may be hard to actually bring about.

21 MR. LYONS: I think there are places where they overlap. I don't  
22 think there are all that many, but we try to manage those. Obviously, if there was

1 an open item that would affect the Environmental Impact Statement we wouldn't  
2 able to move forward with the Environmental Impact Statement. If there was an  
3 open item that was purely on the safety side but wouldn't affect the environmental,  
4 then we could move forward in the environmental. We would make those  
5 decisions, but again I've got them working all for me so I hope to be able to control  
6 that.

7 COMMISSIONER McGAFFIGAN: I didn't give any time back but I  
8 think I'm the one who used the least additional time, 25 seconds.

9 CHAIRMAN KLEIN: Commissioner Merrifield?

10 COMMISSIONER MERRIFIELD: Mr. Chairman, I think in the last  
11 question there was an important point made, that was the expectation about timing  
12 and your point about a one week delay may mean greater than a week down the  
13 road. I think it's very important - we've got a congressional hearing coming up  
14 next week.

15 I think we need to articulate those very clearly so the folks on Capitol Hill  
16 have an understanding of that as well. All too often we get blamed for delays  
17 when many of those delays are outside of our hands and I think we need to make  
18 it clear to all of our stakeholders, including those downtown, that we have some  
19 expectations and those delays may not be our fault.

20 In terms of questions, Jim, the overview of the pre-application activities. I  
21 had a chance to go over some of these issues as part of the task force review. I  
22 don't remember this level of detail relative to the idealized optimal case,

1 compressed case, truncated case. Is that more of a -

2 MR. LYONS: We're continuing to evolve that process as we move  
3 forward, as we get closer. That's a process that –

4 COMMISSIONER MERRIFIELD: This seems like more of a recent  
5 evolution that we didn't get into. I like it by the way.

6 MR. LYONS: Brent has been working on that and has been rolling  
7 that out to industry at these design center working groups.

8 COMMISSIONER MERRIFIELD: You have had workshops to  
9 discuss this in a public form?

10 MR. CLAYTON: Not workshops per say but we have had it in public  
11 design centered working group meetings.

12 COMMISSIONER MERRIFIELD: We've had them in a public  
13 meeting?

14 MR. CLAYTON: Yes. The time that we briefed your committee, we  
15 only had two cases, an idealized and a compressed. As time got closer and  
16 closer, we had to come up with a third case so we got the truncated one.

17 COMMISSIONER MERRIFIELD: I thought there was a little bit more  
18 meat on this.

19 COMMISSIONER JACZKO: That was originally intended to be  
20 truncated and truncated now nobody's meeting compressed so we had to go to  
21 truncated?

22 MR. LYONS: Because of the continuing resolution we really weren't

1 able to start like we wanted to. If we would have started in the January time frame  
2 there would have been about nine or 10 months before an application was going  
3 to come in. The compressed is around that 10 to 12 month period.

4 COMMISSIONER MERRIFIELD: There certainly are folks out there  
5 who have applications coming in the fourth quarter of '08 who can certainly take  
6 advantage of almost any of these. Certainly, starting from the top makes more  
7 sense.

8 Last question relates to the issue of permit conditions. We recently had two  
9 early site permits that we have issued, Clinton and Grand Gulf. We have one  
10 down the line coming in with North Anna and there is variances among the permit  
11 conditions that have applied to those.

12 One of the things that the Commission has attempted to do over the years I  
13 have been here is to try and generate a degree of consistency in our approach.  
14 How are we establishing these permit conditions? Do we have a process in place  
15 to ensure that the conditions for suitability at one site is also required for other  
16 sites to get ourselves back to more consistent approach?

17 MR. LYONS: We're trying to do that. There were some  
18 inconsistencies between the first one and others. The real inconsistencies had to  
19 do the physical characteristics of the sites.

20 In one case, we required certain conditions that we wouldn't need in  
21 another site or wasn't even taking credit for in another site. Probably in retrospect  
22 and looking back we probably would have not had the condition on Clinton on the

1 hydrologic gradient.

2 It was one that we saw as the applicant had taken credit for so we put in as  
3 a condition. I think now we need to step back and say just because the applicant  
4 is taking credit for this doesn't mean necessarily that it has to be a condition.  
5 There's other ways. There's a certain level of commitment conditions that we  
6 should have. We've been looking at that and we will try to be more consistent in  
7 the future.

8 COMMISSIONER MERRIFIELD: I think the staff has great wisdom in  
9 that approach. Of course, that was the approach I was suggesting when we  
10 actually voted on the Clinton site. But nonetheless, I think it's important that we  
11 maintain and we use these as an example to step back, look at it, and learn from it  
12 and make sure we can get to a point where we get to consistency and  
13 predictability in meeting our environmental requirements.

14 MR. LYONS: I agree. I guess what I would say too is the Clinton one  
15 was the first one. Maybe we were being extra cautious, but then going forward  
16 we're not going to be consistent just because we did it that way in Clinton. We're  
17 going to have to do it that way every other time.

18 COMMISSIONER MERRIFIELD: I have no problem with that.

19 MR. CLAYTON: I think you're going to continue see some site  
20 specific ones. For North Anna there's probably going to be a condition in there  
21 that's particular interest to the State about the CZMA permit and the environmental  
22 monitoring for the river flow monitoring. For Vogtle, -

1 COMMISSIONER McGAFFIGAN: CZMA is the Coastal Zone  
2 Management Act for those paying close attention.

3 MR. CLAYTON: For Vogtle, you'll probably see fewer or maybe one  
4 or two less conditions because they have a specific plant design, we won't have to  
5 put a condition there, they fall within their parameter envelope. You'll continue to  
6 see that.

7 COMMISSIONER MERRIFIELD: They point beyond my question  
8 was obviously there's always going to be site specific conditions. Environmental  
9 issues are predicated on the fact that you have to be site specific. That's a given.

10 I was to particularly interested in Grand Gulf and Clinton where obviously  
11 we took a much different approach to similar issues. I agree with Jim Lyons. I  
12 don't think it was appropriate to impose more on a licensee simply because they  
13 prefer something.

14 But nonetheless, I commend all the staff for using these as a lesson to the  
15 extent practicable which can go ahead and do these things on the more consistent  
16 approach.

17 CHAIRMAN KLEIN: Thank you. I'm glad you identified CZMA.  
18 That's not what I normally have on my plate.

19 MR. LYONS: I think we should just stick with the ABCs.

20 CHAIRMAN KLEIN: Commissioner Jaczko?

21 COMMISSIONER JACZKO: I want to make a couple of comments  
22 on some of the things discussed and I'll try to get a question in. Just quickly, early

1 site permits. I think one of the things - perhaps the theme of this round for me is  
2 going to be three letter acronyms. We have ESP, we have DAC, the design  
3 acceptance criteria, and then I'll hopefully get to the Limited Work Authorization,  
4 LWA.

5 In each of those cases it seems like we have not quite held - I guess we  
6 used the analogy of dipping toes and people jumping in water and throw feet in a  
7 different area and that is fire. In those cases we really haven't done a good job of  
8 holding applicants' feet to the fire to implement a process that we've laid out.

9 Early site permits have not been as effective for applicants because we  
10 haven't held applicants accountable to having complete design information in early  
11 site permits. We've allowed issues to be deferred to COL. We've allowed all  
12 these things to happen which defeats the purpose of the early site permit much the  
13 same way the design acceptance criteria is a way that we have allowed applicants  
14 to not really finalize designs yet go through design certification process.

15 Again, I think it's defeated the purpose of really the intention of those  
16 provisions. Which was the early site permit was to get the environmental work  
17 done through an early site permit, resolve those issues in thorough and extensive  
18 detail so that that portion of the licensing process would be resolved and  
19 completed. We have allowed a lot of variation.

20 Commissioner Merrifield brought up the Clinton case. Let's keep in mind  
21 that we did not have very sufficient design detail about the Clinton site in the early  
22 site application. So we had to make fairly general and broad statements about

1 how that site would comply with environmental provisions because we did not  
2 have very much detail.

3 So again, I think this Commission works really hard sometimes to  
4 accommodate a lot of incomplete information. We come up with processes. We  
5 defer things. We go around it to not really make applicants do what they're  
6 intended to do. I think it's unfortunate. As I said there's a third in the trilogy of  
7 three letter acronyms.

8 COMMISSIONER MERRIFIELD: Limited Work Authorization was the  
9 third.

10 COMMISSIONER JACZKO: Limited Work Authorization is the last  
11 one. Here we have a process - Jim you talked a little bit about some of the  
12 challenges with hearings. That's an area where there's been some budget  
13 resources and there may be some need to modify some guidance documents after  
14 Part 52 and those kinds of things.

15 Now the Commission is considering adding a new layer to the process  
16 which would be the Limited Work Authorization which would provide for an  
17 additional Environmental Impact Statement potentially on the Limited Work  
18 Authorization in addition to the Environmental Impact Statement for the COL or  
19 ESP or whatever - I guess for the ESP we wouldn't do it but for the COL.

20 We're going to have to be duplicating that process now with a draft, with a  
21 scoping meeting, with all the things that go into it with potentially an additional  
22 hearing. I have real concerns about us going forward with that particular rule. In

1 particular, given some of the concerns I've heard from the staff about how all of  
2 the scheduling is going to happen.

3 Maybe you can comment briefly perhaps on where you are with Limited  
4 Work Authorization, what you're doing at this point to try and incorporate that into  
5 the process that you see for your staff and how you think that will fit.

6 MR. LYONS: I think the current Limited Work Authorization rule I  
7 think we envision those either as part of an early site permit or as part of a  
8 combined license application that an applicant would also request a Limited Work  
9 Authorization.

10 Therefore, you would be tied to one of those processes. The way I  
11 understand the new Limited Work Authorization rule is that it actually provides -  
12 there's always a provision for a separate process and so yes, we would have to  
13 end up doing an additional Environmental Impact Statement for that. We can tier  
14 off -

15 COMMISSIONER JACZKO: Are you currently planning on that right  
16 now?

17 MR. LYONS: I don't know.

18 COMMISSIONER MERRIFIELD: Mr. Chairman, I think we - Steve,  
19 do you want to weigh in on? Kathryn?

20 MS. WINSBERG: Kathryn Winsberg, Assistant General Counsel.  
21 The Environmental Impact Statement would be prepared for the whole process so  
22 it would be started when the Limited Work Authorization was requested but

1 presumably it would be part of either an early site permit or the combined license.

2 COMMISSIONER JACZKO: One of the issues that we got to is that  
3 we would have potentially a separate hearing earlier on the Limited Work  
4 Authorization aspect. Would that involve then a final EIS, or what would be the  
5 basis for staff decision-making in that hearing?

6 COMMISSIONER MERRIFIELD: Is that necessarily the case?  
7 We've got a legal interpretation here. Is there necessarily an obligation for an  
8 additional hearing?

9 COMMISSIONER JACZKO: Mr. Chairman, since I was asking  
10 questions, could I please get an answer to my question first?

11 COMMISSIONER MERRIFIELD: Mr. Chairman, there is an  
12 assertion about a legal issue. I just want to get that answer from General Counsel  
13 as to whether that's true or not, with no disregard to the Commissioner. He made  
14 an assertion about there is a hearing with Limited Work Authorization, I just want  
15 to understand from General Counsel if that's the case.

16 CHAIRMAN KLEIN: I've never heard a lawyer not answer the  
17 question.

18 MS. WINSBERG: The question you're asking is if there is a separate  
19 hearing for the Limited Work Authorization request. Before it could be approved,  
20 there would have to be a hearing on those issues.

21 COMMISSIONER JACZKO: Prior to a COL hearing which is the  
22 point that I made. Otherwise, there's no utility in a Limited Work Authorization.

1 MS. WINSBERG: The Limited Work Authorization wouldn't be  
2 approved before approval of either an early site permit or the combined license.

3 CHAIRMAN KLEIN: I guess the question is you wouldn't do an LWA  
4 unless you had an ESP or COL.

5 COMMISSIONER JACZKO: If I could clarify. With an early site  
6 permit we do not need a new Limited Work Authorization rule because there are  
7 Limited Work Authorization provisions in current Part 52. It would not come with  
8 an ESP or it potentially could with the new rule, but if you have an ESP currently  
9 we do not need a Limited Work Authorization because you get that with an early  
10 site permit. One of the advantages of doing an early site permit, is that correct?

11 MS. WINSBERG: That's correct under the current rule.

12 COMMISSIONER JACZKO: Under the current rule. The purpose  
13 and advantage of a Limited Work Authorization is to begin pre-construction  
14 activities before you have received a license application, is that correct? To be  
15 legal, if you could answer that question.

16 MS. WINSBERG: The new Limited Work Authorization rule redefines  
17 which activities are considered Limited Work Authorization activities so there's  
18 some activities that are now going to be pre-construction preparation activities that  
19 do not require an approval.

20 COMMISSIONER JACZKO: But there would be some issues that  
21 would have to be dealt with in a hearing prior to that?

22 MS. WINSBERG: The activities that are newly defined as requiring a

1 Limited Work Authorization; that actual construction activities that are defined as  
2 needing a Limited Work Authorization, there would have to be an approval and  
3 there would have to be a hearing associated with those.

4 COMMISSIONER JACZKO: Thank you. That hearing could  
5 potentially be separate from a COL hearing?

6 MS. WINSBERG: It's part of the COL application - part of the COL  
7 process.

8 COMMISSIONER JACZKO: Those matters have to be adjudicated  
9 separately and could potentially require additional decision-making documents for  
10 those to occur. If there is going to be environmental work done at the site there is  
11 going to be changes to the environment that has to involve environmental  
12 documentation through the NEPA process; is that correct?

13 MS. WINSBERG: Yes.

14 COMMISSIONER JACZKO: Thank you. So that would involve  
15 potentially an early Environmental Impact Statement on those particular activities if  
16 the staff were to allow those to move forward in a Limited Work Authorization?

17 MS. WINSBERG: That's correct. But it would be part of the whole  
18 proceeding.

19 COMMISSIONER JACZKO: It would involve doubling the process of  
20 an EIS process. You would have to do a separate scoping on that potentially.  
21 You may do separate process later that could be tiered off of that EIS?

22 MR. CHANDLER: Lawrence Chandler. It wouldn't necessarily

1 involve any duplication but it might require separate consideration in different  
2 stages than currently is done, but you wouldn't be repeating the process two or  
3 three times to get to the end of the process. You would start it perhaps at a  
4 different stage. You would address a subset of issues that were pertinent and you  
5 would then come back to the process and resume where you were. It wouldn't  
6 duplicate or repeat a process you had already undertaken.

7 COMMISSIONER JACZKO: Thank you. That was the last question I  
8 had.

9 CHAIRMAN KLEIN: Thank you for the last question. Commissioner  
10 Lyons?

11 COMMISSIONER LYONS: We'll see if mine are shorter. On Slide 14  
12 on pre-application interaction, you list five different sites. I'm not sure if this is for  
13 Jim or Bill. There's five sites listed for pre-application interactions. Four of those  
14 are AP1000 and one is an ABWR and none are ESBWR. I was curious; why not  
15 ESBWR?

16 I was curious if this ties in perhaps with some of the concerns that were  
17 expressed earlier on some of the possible delays in the ESBWR certification or is  
18 this simply a random list and I shouldn't be making too much of it.

19 COMMISSIONER McGAFFIGAN: I'll venture that it's because  
20 Dominion at North Anna has an ESP.

21 MR. LYONS: We wouldn't do a pre-application review -

22 COMMISSIONER LYONS: That's a perfectly good answer.

1 MR. CLAYTON: Let me clarify what Jim said. We did have some  
2 pre-application interaction with North Anna already, but it's a much more limited  
3 scope than we would do for a plant that doesn't have ESP. We also have  
4 upcoming that doesn't show here yet but we're planning to have similar activity  
5 with Grand Gulf. It won't involve a site visit.

6 COMMISSIONER McGAFFIGAN: Which is the lead ESBWR? Is it  
7 Grand Gulf or is it North Anna?

8 MR. CLAYTON: Can somebody help me out - good question.

9 COMMISSIONER MERRIFIELD: They are co-leads.

10 COMMISSIONER McGAFFIGAN: Whoever gets here first?

11 MR. SHUAIBI: They haven't indicated yet. Both applications are  
12 scheduled to come in on November 8<sup>th</sup> but they haven't said which one would be  
13 the lead.

14 COMMISSIONER LYONS: Another question. Bill, you commented  
15 on the extent of effort to maintain an appropriate cadre of contractors who would  
16 be ready to step in and bring capabilities to bear as needed. You mentioned that a  
17 number of those would be National Labs.

18 I'm just curious, as the Department of Energy is moving toward re-  
19 competing contracts and encouraging large numbers of different entities to  
20 participate in oversight of a particular laboratory that has certainly led to conflict of  
21 interest concerns as we have interacted with some of those laboratories.

22 I was just curious if you are evaluating the potential for these conflicts as

1 you look at these contractors, at the contractors you have lined up, and if you're  
2 paying careful attention to which contracts DOE is currently re-competing because  
3 to the extent they're re-competing you may have a very different management  
4 framework and a very different conflict of interest set of challenges for that  
5 laboratory. It could change overnight, essentially. Is this something you're  
6 considering as you do this?

7 MR. BORCHARDT: Yes. It's an issue that has been identified that  
8 we're watching closely, working with the Office of Administration to make sure that  
9 we have the right separation should there be some change in management of the  
10 labs.

11 COMMISSIONER LYONS: I appreciate that. I think that's an  
12 important issue, presuming that DOE is going to continue with this pattern of  
13 contracting. It may get more and more challenging to avoid those conflicts. Thank  
14 you.

15 CHAIRMAN KLEIN: I'd like to also echo my concern with the  
16 perceived conflict of interest because I think that will get more difficult as these  
17 laboratories are managed by multiple teams.

18 And so as we move forward, somehow we have to have a standardized  
19 way to address that perceived conflict with the National Labs. That's going to be  
20 an issue I think that gets more challenging before it's easier.

21 Just one question. You talked about the hearings having more time and  
22 questions than originally anticipated. Could you talk a little bit about - did you

1 underestimate or is it because of the use of e-mail making it easier to have  
2 questions. What caused that?

3 MR. LYONS: We underestimated the number of questions or  
4 comments that we would get. When you look back, we had 13,000 on North  
5 Anna; we were in the hundreds 500 or 600 for the others. There weren't that vast  
6 number for Clinton and Grand Gulf. We didn't really see it coming, I guess.

7 But then for the hearing itself, the boards, that was different. We thought  
8 we had provided a very complete Environmental Impact Statement and then we  
9 were getting a lot of questions about how do we do this, why do we do that. A lot  
10 of the questions really had to do with how does the staff perform its reviews. How  
11 do we reach our conclusions?

12 The fact that some areas are looked at in a fairly narrow area and not in  
13 depth because it's not a significant issue where as other significant issues we  
14 would spend a lot of time on explaining why they were different from the guidance  
15 we always followed and why it was acceptable.

16 There were a lot of questions like that I would say if you would educating  
17 the boards as we went through the process on how we do our reviews and why we  
18 find those reviews to be acceptable.

19 CHAIRMAN KLEIN: When you look at the number of questions - you  
20 had 1,300 people asking 13,000 questions. How do you verify that those 1,300  
21 people are in the zone of interest as opposed to in another?

22 MR. LYONS: We don't. When we issue a draft Environmental

1 Impact Statement for comment it's open to anyone who wants to comment on it.

2 CHAIRMAN KLEIN: Including outside the U.S.?

3 MR. LYONS: I don't know if we had any outside the U.S.

4 CHAIRMAN KLEIN: How would you know if it comes in by e-mail?

5 MR. LYONS: Yes, we do. We would take comments from anybody.

6 MR. BURNS: I think the EIS process is like a rulemaking process or  
7 a FOIA process. There's not a comment or a threshold sort of standing if you will  
8 unlike an adjudication or a more formalized process.

9 CHAIRMAN KLEIN: I think that does demonstrate you're going on a  
10 good path to have a database for which once you addressed issues you don't  
11 keep redressing those. I would encourage progress on that aspect.

12 MR. LYONS: When we were looking at the contractors, there is  
13 off-the-shelf programs that will track your comment and resolution, but they won't  
14 store them. That's where we see the real value is that you need to store them  
15 from process to process.

16 COMMISSIONER MERRIFIELD: I'm sure they had another package  
17 of software they could tell us to do the follow up part.

18 MR. LYONS: Probably. Pacific Northwest National Labs is helping  
19 us develop something that would actually allow us to keep track of those  
20 comments and pull them back up.

21 CHAIRMAN KLEIN: Good. Commissioner McGaffigan?

22 COMMISSIONER MCGAFFIGAN: I'll start by saying we are

1 scheduled to affirm the Limited Work Authorization rule and Part 26 just before  
2 one o'clock today. Those affirmation sessions are oftentimes pretty mundane but  
3 today there might be some discussion on both of those.

4 I'm not trying to get people to come to the follow up Research briefing, so  
5 I'm not going to engage in the LWA discussion until we finalize the rule.

6 The issue that Commissioner Merrifield brought up I'll just bring up very  
7 briefly. I think one of the lessons you should learn is that you confused couple  
8 boards with this any and all language in hydrology area and the Commission  
9 eliminated it twice. It goes well beyond Part 100 and it wasn't what you really  
10 intended, which is what you explained to both boards, yet it was there.

11 I hope that we don't see a lot of further overreaching of that sort that the  
12 board sort of catch and get confused by and we end up having to fix.

13 MR. LYONS: Okay, we'll keep an eye on that.

14 COMMISSIONER McGAFFIGAN: That's all I have.

15 CHAIRMAN KLEIN: I'd like to thank you for a good presentation. It  
16 was of interest since we went much over our allocated time. I'd like to thank you  
17 for your presentations; congratulate you on past successes and we look forward to  
18 many more future successes. Meeting is adjourned.

19 COMMISSIONER MERRIFIELD: Mr. Chairman, I'd like to make a  
20 closing comment. I, too, would like to join you in saying I appreciate the work the  
21 staff has made in this presentation. I agree with Commissioner Lyons, that was a  
22 very good presentation and very informative.

1           For the record, I just want to make a comment about some things that have  
2           been said earlier. Life always looks a lot clearer in 20-20 hindsight. Obviously,  
3           over the course of the time since we entered into the early site program and we  
4           entered into dealing with issues associated with design acceptance criteria, I think  
5           now it's easy to say we could have been clearer and sharper in our focus and in  
6           our requirements.

7           But when we entered into the programs for certifying designs, dating back  
8           to the System 80 Plus which was a very long time ago. I don't remember the date  
9           we finally certified it, but we began that process late '80s, early mid-'80s. That was  
10          a time when nobody believed there's going to be any reactor orders anytime soon.  
11          At least nobody -

12                        COMMISSIONER McGAFFIGAN: We were doing that because the  
13                        applicant thought they might want to build some of these in South Korea.

14                        COMMISSIONER MERRIFIELD: With early site permits while people  
15                        went down the road and got their incentives from the Department of Energy it was  
16                        sort of not much more than a gleam in the eye.

17           I think to look at that now and say we should have done this and we should  
18           have done that, I think is a little harder to do in light of the circumstances that the  
19           Commission and our licensees were grappling with at that time that we entered  
20           into those.

21           The final one is on early site permit. This is only the view of this one  
22           Commissioner. With the exception of a small number of licensees who I believe

1 may try to do early site permits for greenfield sites and which they currently do not  
2 have facilities and don't have necessarily current plans but potential plans for  
3 building plants, in my view that's really down the road where you're going to see  
4 for the early site permit program and they will be the exception to the rule.

5 It was arguably a useful tool Congress created to keep the programs  
6 moving forward but if a licensee recognizes that they want to build a nuclear power  
7 plant and they know where they want to build that plant, it makes in my personal  
8 view, no sense to me if I had to advise a company to go down that road. Thank  
9 you, Mr. Chairman.

10 CHAIRMAN KLEIN: Any comments?

11 COMMISSIONER JACZKO: I would just add that it was a very  
12 interesting briefing, I appreciate the staff's presentation.

13 CHAIRMAN KLEIN: Now the meeting is adjourned.

14