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UNITED STATES NUCLEAR REGULATORY COMMISSION
PERIODIC BRIEFING ON NEW REACTOR ISSUES
(MORNING SESSION)

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WEDNESDAY

AUGUST 22, 2007

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The Commission convened at 9:30 a.m., Dale E. Klein, Chairman presiding.

NUCLEAR REGULATORY COMMISSION

DALE E. KLEIN, CHAIRMAN

EDWARD MCGAFFIGAN, JR., COMMISSIONER

GREGORY B. JACZKO, COMMISSIONER

PETER B. LYONS, COMMISSIONER

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PANEL 1: INDUSTRY REPRESENTATIVES

MARVIN FERTEL, Senior Vice President and Chief Nuclear Officer,
NEI

CHRISTOPHER CRANE, President and Chief Nuclear Officer,
Exelon Nuclear

DAVE CHRISTIAN, Senior Vice President and Chief Nuclear Officer,
Dominion Generation

PANEL 2: PUBLIC STAKEHOLDERS

RICHARD KNAPIK, Mayor of Bay City, Texas

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MORNING SESSION

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

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CHAIRMAN KLEIN: Good morning. Unfortunately, Ed McGaffigan will not be here this morning. He's got some other issues that he's trying to work on, minor things called budgets that we're trying to get through the system.

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I'd like to welcome you all and we appreciate hearing from the industry this morning. Good to see Mayor Knapik from Texas here today. We had invited seven other individuals representing the public interest stakeholders and other local governments and we hoped for a great turnout, but we really appreciate the mayor coming in for that and at least you didn't have to dodge the hurricane coming in.

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MR. KNAPIK: Thank you, Mr. Chairman. Appreciate it.

CHAIRMAN KLEIN: So we'll have additional public stakeholder comments at a later meeting, but I appreciate you taking the time and effort to come today. We'll also have another meeting this afternoon when we hear from the staff and so probably we'll see some of you in the audience today.

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But I must say that I've been impressed by all the work, both from industry and our staff on these new reactors, so I think we're making progress. We have a lot of work yet to go, but we look forward to hearing your comments and Marv if you'd like to start. Any comments first?

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COMMISSIONER JACZKO: If I could just make a brief comment.

1 I'm going to put this out there because this is a longstanding issue that I've been
2 working to try and get an answer on. I'll throw it out there so maybe if you can
3 touch on it or I'll ask it in my question, but it again goes to perhaps a little bit more
4 in the pessimistic category in terms of where we are in progress.

5 Back in February of '07, we had a meeting like this with staff and one of the
6 questions I asked then was what are we going to do for fire protection for new
7 reactors? Again, we had a discussion yesterday about how well I'm doing reading
8 my mail and unless I'm not doing a good job reading my mail, I don't think -- I still
9 haven't gotten a clear answer on what exactly the approach will be for fire
10 protection going forward. That to me is an indication that there's still a lot of
11 uncertainty out there about what these applications are going to look like; what the
12 approaches are we're going to take for crucial issues and fire protection is one that
13 I have repeatedly said is not going to be a problem and it shouldn't be a problem
14 because we should be able to design these facilities to deal with fire protection in a
15 way that we didn't for the existing fleet.

16 So I'm hopeful either in the discussion today or maybe in the question and
17 answer either with you all or with the staff to finally get that issue perhaps resolved
18 and we can move on to other things. So that was the only thing I thought I'd throw
19 out there, so perhaps it will come up in the discussion and if it doesn't then
20 perhaps this afternoon the staff will have an answer on that. So thank you,
21 Mr. Chairman.

22 COMMISSIONER LYONS: I am looking forward to your presentation.

1 The closer we get to actually having a full COL application, the more interesting it
2 will be.

3 MR. FERTEL: Thank you, Mr. Chairman, Commissioner Jaczko and
4 Commissioner Lyons. We're pleased to be here. I think you certainly know Chris
5 Crane. Chris is also the Chairman of the New Plant Oversight Committee. You
6 know David Christian. And David is not only one of the near-term submitters of a
7 COL this fall for the North Anna site, but he's also our lead person interfacing with
8 the staff and with the industry on the aircraft impact assessments. So David is
9 here from that perspective and we're pleased to have the honor of sitting here with
10 the mayor.

11 We are going to try and update you on where we are and I can only agree
12 with what the Chairman said. I think there's been excellent progress made and I
13 will touch on fire protection at the end of my comments and we can pick it up later,
14 too. But there's been excellent progress made with the staff.

15 We have very few items that we're going to bring up today that we think
16 need attention to support the submittal of the COLs because of the good work the
17 staff has done and other stakeholders and the industry, we believe. We are going
18 to cover some issues today that we haven't spoken about too much in the past
19 because they're raised by the Chairman and the other Commissioners, like work
20 force, supply chain management, addressing fraudulent and bad parts.

21 And we do want to identify some significant priorities going forward and
22 make sure they don't get lost because everybody is focused on filing the COLs

1 and reviewing those. But if we build the plants, we have other issues that we need
2 to address like the construction inspection program and ITAAC reviews. So we
3 want to make sure those stay on the screen as well as some of the rulemakings.
4 Could you go to the third slide? Go to the next one.

5 There's a number of policy issues that we wanted to touch on. One of them
6 is getting Part 26 published. We know the rule is finished. We'd like to see it out.
7 The primary reason for that is that the fitness for duty requirements that are
8 required for new construction projects are in Appendix K of Part 26. They do differ
9 in requirements from the current Part 26.

10 It would be much more conducive to the filing of license applications if you
11 were complying with the rule that will be in place, not only when you're building,
12 but probably within weeks of when you might even file. So our encouragement is
13 to get the rule out. We'll work with the staff on how to address an interim situation
14 if the rule can't be out by the time we file license applications this fall, but if it could
15 get out, it would actually be a real plus.

16 Going to an issue that's actually in our comments on your proposed policy
17 statement, we believe from an industry standpoint that there's a real value to
18 noticing a hearing on a partial application submittal, particularly the environmental
19 portion. We understand that ideally you would have a certified design, you'd have
20 early site permits banked, and you'd be coming in with the COL and some of the
21 issues on environmental reviews would already have been achieved because you
22 did the ESP and you'd have a certified design.

1 When we look at today's situation, we have a number of companies who
2 are in the process of making decisions on whether they're going to be able to get a
3 plant on line by 2015 or 2016 and anything they can do to shorten the overall
4 project schedule has value. And one of the things a partial submittal does with a
5 hearing is it not only helps to surface some of the environmental issues early and
6 you deal with them, but it tee's up the fact that you can go for an LWA quicker.

7 And while it may, and I understand the staff believes it does, increase the
8 licensing time, it could conceivably we believe will shorten the project time
9 because I'll be able to do site work that I couldn't have done otherwise sooner and
10 even though I may get my license a little later on the schedule then I might
11 otherwise have gotten it, I would actually get more work on the project and shorten
12 the overall project time.

13 So in our comments from NEI and I think from a number of the industry
14 sources on the proposed policy statement, we have encouraged the Commission
15 to allow for hearings when a partial submittal is docketed. We'd like to work with
16 the Commission and the staff to try and make that happen.

17 We understand it may not be ideal. We think is important in the transition
18 and we think it actually facilitates moving forward on the project schedule itself.

19 The third issue that we wanted to touch on today is on Emergency
20 Preparedness. Most of the COLs are at sites that already have power plants at
21 them, so you have an emergency plan in place. You've been drilling it. You've
22 been exercising on it. It's been determined to be adequate from FEMA and from

1 the NRC.

2 When we look at putting another unit at those sites, we can see where the
3 EALs might be different. We can see maybe some changes in the emergency
4 response organization that the NRC would have to review, but when we look at the
5 offsite activities there really is very little, if any, difference in determining whether
6 you have reasonable assurance on the adequacy of emergency preparedness
7 program. It's another unit at an existing site.

8 The offsite folks would certainly be trained in what's going to go on at the
9 plant and what might be different there, but fundamentally the actions offsite don't
10 know whether it's Unit 1 or Unit 2 or Unit 3 that's causing them to act. We think
11 that having discussions with NRC and FEMA together on that is going to be
12 important to make sure that as we look at emergency preparedness for the new
13 plants, we're looking at the right things which are what's different with the new
14 plant.

15 We think almost all the differences, to be honest, fall into the responsibility
16 of the NRC with very little, if any, change to what FEMA should be looking for on
17 the determination of adequacy offsite. So we think that's an important area.

18 The last item that we'd like to mention at this meeting is we believe that it
19 would be prudent and reasonable for NRC to consider reaffirming their waste
20 confidence position that they currently have in rulemaking. We understand that as
21 it is right now it is adequate for the decisions being made today. We firmly believe
22 and we believe that if you reaffirm that you would find that it's still adequate going

1 out well into the future.

2 We think there are change situations in addition to just the new plant
3 activities. Our government is seriously looking at the potential to close the fuel
4 cycle which could change how we look at what's going and when it's going to a
5 deep geologic repository. We know and we're encouraged that DOE is going to
6 submit a license application to NRC by June of next year. We believe that will
7 probably happen, but even if that happens, we are concerned that the licensing
8 process may take much longer than the three or four years that the Nuclear Waste
9 Policy Act anticipated.

10 And while we believe there's been a lot of science done there and that the
11 science is good and the site should be licensed, that's not a given. It's going to go
12 through a rigorous process here and it could turn out that there's a problem that is
13 determined by the NRC.

14 The thing that we think would be harmful to decision-making at the
15 companies and then to the licensing process themselves is to have this become
16 an issue in individual proceedings. We think it would delay proceedings. We think
17 the potential for that could actually impact decision-making by corporate boards.

18 So our recommendation would be for the Commission to look at going
19 forward to update the rulemaking and to have that behind us as soon as possible
20 as this licensing process begins and particularly as the companies make
21 decisions. I think Chris and Dave will speak for themselves, but while you're
22 getting a whole bunch of applications, there have been no final decisions made by

1 any of the companies that they are going to build.

2 They're making major investments on long lead time items. They're going
3 forward with the COLs, but firm decisions are still being discussed and evaluated
4 at the Board level. So anything we can do from our standpoint to relieve what
5 people perceive as risks, we think is important and that's one that we do perceive
6 as a risk.

7 The last comment I'll make before turning this over to David is on some of
8 the issues that David's going to touch on, looking at it as a near-term COL filer.
9 We are obviously committed to standardization. We've said that so many times
10 that hopefully we actually not only believe it ourselves, but we're implementing it.

11 But one of the things we are seeing on programs is that when I'm putting
12 another unit at an existing site and certainly if I'm putting it at a fleet where they
13 have programs that apply to the whole fleet, what we're going to do, what the
14 companies want to do is implement programs that are consistent with the
15 operations of their other units, either at that site or cross their fleet; not create new
16 programs for one unit or maybe even two units that are going to be added that are
17 different.

18 I think that that may be -- we don't want that to be confused at all with us
19 walking away from standardization. We are sticking with standardization on plant
20 design and everything else, but on programs it's important for us to maintain
21 standardization with the current fleet operations until we change those. That could
22 change at some time, but we're operating a lot of plants now. We're adding

1 incrementally some and it's important that the operations aspects are standardized
2 with the way we do business today.

3 Let me just comment, Commissioner Jaczko has asked on fire protection
4 and I'll make a short comment and during the questions and answers we can
5 certainly elaborate. I think the answer to the question of will the plants be
6 designed to address fire protection, the answer is absolutely yes.

7 We have the benefit on the new designs which we didn't on the current
8 plants, Appendix R came in after a lot of the plants were built, so what we are
9 doing on the new designs is we're basically building in the separation, the risk
10 assessments that we need to do to deal with what Appendix R and 50.48 once
11 would have anticipated you would have done if you were designing from scratch.
12 So the new designs are being designed to minimize fire risk.

13 What we actually see is fire risk is going to be a very low contributor at core
14 damage frequency. The NFPA 805 is actually kind of a back fit to deal with how
15 do you look at the current plants smarter in regulatory space given you didn't have
16 the requirements defined when you designed those. So the answer to your
17 question is fire protection is not in NFPA 805 --

18 COMMISSIONER JACZKO: Perhaps I wasn't direct enough with my
19 question, so the answer is they are going to follow an Appendix R model?

20 MR. FERTEL: They're going to follow an Appendix R model
21 satisfying 50.48.

22 COMMISSIONER JACZKO: So we won't need 50.48C or whatever;

1 NFPA 806 which is the --

2 MR. FERTEL: We understand and I can't tell you that I know this for
3 true because we can't seem to get a really good answer on this; at least I can't.
4 We understand 806 isn't for light water reactors that it's for the next generation
5 reactor. We're not quite sure what's going on, but we understand -- it's called new
6 plants, but we think it's for new plants, not advanced light water reactors.

7 COMMISSIONER JACZKO: So the answer is Appendix R.

8 MR. FERTEL: Appendix R, 50.48. I'll turn it over to David.

9 MR. CHRISTIAN: Good morning. We're on slide five. In the 10
10 months since the last time the Commission was briefed on new plant activities
11 substantial progress has been made on achieving a common understanding of
12 some 300 new and updated guidance documents. There are a few open issues
13 remaining we would like to see brought to closure or to achieve common
14 understanding on and those are listed here. I will go over them in order.

15 With respect to access authorization during construction, because of site
16 separation activities from the operating units, there is no radiological hazard on the
17 work site and there is no immediate threat to public health and safety. We will
18 have in place stringent construction QA and construction QC programs to ensure
19 systems and structures meet their safety requirements and that will be followed up
20 ultimately at the time of startup by startup testing programs to ensure that they
21 meet their functional requirements and no malevolent acts have been committed.

22 Nonetheless, the industry is committed to instituting checks focused in three

1 areas: terrorism, illegal aliens and outstanding felony warrants. The industry is
2 proposing that at pre-employment we gather Social Security and identification
3 information and provide that to the FBI and DHS and get a more or less yes/no
4 answer from NCIS and DHS. And then at six month intervals provide that
5 information again to DHS to do terrorists checks.

6 And then prior to arrival of new nuclear fuel some predetermined date we
7 would implement a full operational access authorization program.

8 In the area of Digital I&C, substantial progress has been made. The
9 dialogue has been excellent and we appreciate very much the Commission
10 involvement to focus stakeholder interaction to achieve the progress that has been
11 accomplished.

12 I want to mention that at the briefing that took place last October the issue
13 was raised with respect to whether or not simulators would have to be ordered
14 prior to contracts being entered into for plants. And after a great deal of study by
15 the interested parties, it has been concluded that it is now clear that we don't have
16 to develop and issue a complete specification for simulators in the time frame that
17 was estimated last year and that part tasks simulators can be used and still have a
18 full simulator available for the first set of operators to be licensed to operate the
19 unit.

20 As a result of the work of the NRC and NEI's Digital I&C Working Group,
21 there are six task areas that continue to be open. Four of those are on track to
22 reach resolution by year's end: cyber security, diversity and defense in depth, and

1 integrated control and communications and human factors. The sixth task of risk
2 informing Digital I&C is a generic long-term R&D project which we think will not
3 impact COL submittals.

4 Designers have already submitted topical reports on various Digital I&C
5 subjects and these topicals should be reviewed in parallel with the development of
6 guidance to better focus the NRC industry interactions and provide input to the
7 development of practical guidance to enable designers to move forward with the
8 development of a detailed design.

9 I have some comments on the new process for a new QA process for
10 effluents. The program described in Reg Guide 4.15 has been reviewed by
11 subject matter experts in the industry and their general conclusion is that it
12 appears to provide no additional benefit while imposing significant additional
13 burden. In essence, my staff advises me that it imposes a totally different process
14 from what's presently in use and doesn't represent a step forward towards more
15 effective or efficient regulation.

16 The training program for a 1,000 page guidance document on the multi-
17 agency radiological laboratory analysis protocols, the training for that alone to
18 understand the document is estimated to take about three days for the required
19 individuals and implementing it as written would require us to overhaul the existing
20 programs and retrain a significant number of our laboratory staff.

21 We believe there are avenues for improving the QA processes for effluent
22 streams through constructive interaction and we need to look forward to

1 re-establishing and maintaining a dialogue to develop a better document.

2 With respect to radiological protection, the draft Reg Guide for 20.1406 was
3 issued this month and the industry is preparing comments and the final Reg Guide
4 will not be issued until mid-2008. This introduces a measure of uncertainty for
5 COL applicants and what we would encourage is accelerating this Reg Guide as
6 we have done for other important Reg Guides with respect to COL applications.

7 The industry is developing a generic template for several areas: radiological
8 protection program description, ALARA, offsite dose calculation manual program
9 descriptions, process control programs, cost-benefit analysis for RAD waste
10 systems and these templates will be submitted to the NRC staff by September 30th
11 for review and approval by the NRC staff and public meetings will be held to
12 ensure that they can be approved by year's end.

13 With respect to IST and ISI, we appreciate once again the constructive
14 dialogue that has been ongoing and the progress that has been made. Much
15 progress has been made towards reaching a common understanding on program
16 descriptions for the COL applications. We do think this requires continued focus,
17 especially for those of us that are going to be submitting in the near future to make
18 sure we can get to the required level of detail.

19 The industry's position is that we should take full advantage of codes and
20 standards to define these processes and it should be standard that if something
21 meets the ASME boiler and pressure vessel code, unless there's a specific safety
22 concern otherwise that the ASME boiler and pressure vessel code should stand on

1 its own for safety determination.

2 With respect to PRA, the comment there is that under the existing
3 guidelines a significant quantity of information might be required to be included in
4 the FSARs that is of questionable value. Certain sequences of ten to the minus
5 ninth risk impact for core damage frequency would have to be included because
6 they might constitute a summation of 1% of total risk. And we think that the
7 current guidelines are not really reasonable for new plants as the screen
8 sequences on the order of ten to the minus nine.

9 I'd like to also make a comment on large release frequency versus large
10 early release frequency. The new guidance on PRAs for new plants requires the
11 use of large release frequencies as opposed to large early release frequency. The
12 NRC guidance and all existing PRA applications for operating plants use large
13 early release frequency and the process for reaching a common understanding on
14 that took a number of years and we think that that might also be the case for large
15 release frequencies.

16 And so for near-term deployment, the use of large early release frequency
17 would be consistent with current operating practice. Over time, we may wish to
18 reach a common understanding on large release frequency.

19 With respect to the Commission's directed transparency and accountability
20 in the hearing process, we believe that there would be benefit in mirroring the
21 process that was initiated and successfully applied during the license renewal
22 through the Commission direction of milestone setting for schedules for hearings

1 and reviews.

2 We do understand that the NRC staff will set definitive review schedules
3 based on the acceptance reviews of applications. We strongly endorse the
4 Commission becoming the presiding officer for determining whether or not there
5 should be an ITAAC hearing and we also believe that there would be benefit in
6 providing additional direction that is more appropriately tailored to the limited
7 issues that will be before the Licensing Board should an ITAAC hearing be
8 necessary. We are on slide six.

9 Just to provide a couple of comments on some of the rulemakings. I think
10 Marv spoke to this earlier on Limited Work Authorizations for the market
11 participants that have not elected to use the ESP approach and have gone direct
12 COL. It is quite possible that improved project schedules could be achieved
13 through finalizing this rulemaking and allowing Limited Work Authorization in
14 advance on an accelerated schedule.

15 With respect to aircraft impact, both the NRC and the industry have set up
16 organizations -- excuse me just a minute -- with respect to aircraft impact, we
17 recognize that the NRC has set up an organization to deal with that in a parallel
18 fashion. On the industry side, we have a similar approach and we support the
19 decision to move the aircraft impact to be part of the design certification.

20 We've moved forward to evaluate the designs. Two designers have been
21 provided with the information on aircraft profile and that evaluation is in progress.
22 We understand that the other two are to be provided that information in the not too

1 distant future.

2 In addition to the task force which has been established by the industry, an
3 industry peer review group has been established. These members are the same
4 people that did the aircraft impact analysis for the operating plants. What we're
5 trying to do is to assure high quality evaluations and consistency in the application
6 of methodologies and a consistency in the way the results are interpreted. We
7 intend to stay engaged at the executive level and working levels to complete this
8 task.

9 With respect to 73.55, again, although the revised rule has not been issued,
10 the industry is already taking actions on new plants. The design centered working
11 groups have conducted reviews of designs, proposed designs against the insights
12 gained and performing assessments on operating plants. And designers are
13 adjusting designs to incorporate design centered working group recommendations.
14 We recognize the importance of making sure rule language is correct and
15 unambiguous. I'll turn it over to Chris Crane.

16 MR. CRANE: I'm going to cover a couple other areas that are
17 considered critical tasks for the industry. Starting on slide seven. One area that
18 we are focusing on is the lessons learned from recent construction experience and
19 startup projects. We have with the assistance of INPO, NEI and all utilities that
20 are heading forward on COL, started to review past regulatory reports,
21 construction lessons learned not only from the previous construction period in the
22 U.S., but also the actions that took place are ongoing at the LES facility in New

1 Mexico, AREVA experience from near-current projects that are under way, the
2 Browns Ferry restart at Unit 1 at Browns Ferry and we have multiple companies
3 developing closer ties in Asia, primarily Japan and Korea on their current
4 construction experience lessons learned and techniques. So we'll continue to
5 develop our construction startup methodologies, standard methodologies with
6 those lessons incorporated.

7 Another major focus area for us, and we've had multiple comments from the
8 Commission, is on the supply chain and the quality of the programs that the
9 suppliers have. With 28 reactors under construction right now worldwide and 120
10 in some phase of planning, we are focusing greatly on -- the supply chain now
11 has gone to an international market verses previous developments were primarily
12 focused on the U.S. supply chain. The U.S. manufacturing base has shrunk by
13 80%, so we do anticipate that international requirement to support.

14 We have studies that have been underway with the task force, the supplier
15 task force that NEI has put together, that show we have significant shortages in
16 some specific components forgings; specialty valves and safety related batteries
17 are just a couple of examples. About every component you identify there is a
18 supply chain shortage that needs to be addressed.

19 We're expanding the role of NUPIC, the industry's audit arm that evaluates
20 the quality aspects of the current suppliers and we're continuing to focus on
21 developing methods for detecting counterfeit and substandard parts. There are
22 already programs in place such as testing inspection and other aspects on the

1 receiving dock and as you're commissioning the individual components of the
2 systems to validate their integrity, but there may be other methods that we'll
3 continue to evaluate to ensure that we understand what we're putting in our
4 facilities. This will continue to be a focus and we'll update you as we have
5 developments.

6 The next area we'll talk about is work force. This is not just an industry
7 issue for us. It's a national issue, primarily focusing on the skilled craft area. In
8 the next 15 years, the U.S. electrical infrastructure is going to require \$750 billion
9 to be invested and that will be on the backs of the skilled craft installing the
10 transmission and generating assets. The pool is currently shrinking in most areas.
11 The Southeast right now has projected a skilled craft shortage of over 20,000
12 individuals in the next 10 years. So it is a significant growing problem and that's
13 just for maintaining existing infrastructure, regardless of building new.

14 There have been regional and national groups that have been working on
15 the issue, working to seek grants. There's the Center for Energy Work Force
16 Development, construction user group round tables. In individual states there's
17 actions being taken; the Southern Governors' Association is working to develop a
18 summit that will be hosted by the governor of Mississippi next week to try and
19 elevate the issue and understand different methodologies that we can use to
20 attract individuals into the building trade's area.

21 Last week in Joliet, Illinois, we held a job fair to entice high school
22 individuals into a junior college in Missouri that specializes in radiation protection

1 programs. The time was up and we still had hundreds in line to get information
2 and we just had to hand it out in masses. So we think the availability is there. We
3 are not confident that the marketing being adequately addressed, not only by
4 utilities, but also by the building trades. We're going to continue to focus on that.

5 When you do the comparison of wages, individuals going into the service
6 industry would be far better off going into the building trade. We'll continue to drive
7 those initiatives as we go on.

8 Next area on the next slide talking about some of our activities on preparing
9 the COLs for the design certification. That is our primary focus. We're going to be
10 working on workforce, supply chain, getting ready for construction, but we need to
11 make sure that we continue to drive the design certification from our aspect on
12 supporting it to enable the NRC review.

13 We must move forward with developing the guidance and preparing for the
14 implementation of construction under Part 52. There are some areas of concern.
15 The first being the ITAAC close out. It's a large area of uncertainty for us. We do
16 believe that we need to define the process and reach some common
17 understanding by the end of next year, '08.

18 If you look at the LWA process, you look at our construction planning
19 process, our scheduling for large resources; this area has to be factored in. So
20 closure on it and an understanding would benefit all of us.

21 Improving the environmental reviews. We talked about a little bit about this.
22 We understand that the first grouping of units to come in, the prototypes for the

1 design review and certification will take a little bit longer. When you get the
2 second wave of the applications, the time line in our review, and it could be
3 considered one-sided, but our review is more of 12 months versus 30 months. It's
4 a site specific review, an environmental focused review. We understand the
5 design basis of the facilities and as long as we hold to our word that we're going to
6 maintain standardization, the first ESBWR, if its North Anna, subsequent ESBWRs
7 as we said are going to have a light switch in the control room in the same
8 location.

9 We shouldn't distract from the staff with trying to fluctuate the designs or
10 vary the designs, but we would like consideration on what we could do to improve
11 the environmental review.

12 We do support the NRC's idea for a workshop. Unfortunately, our staffing
13 crunch as we're trying to get in the first wave of COLs in the September time
14 frame, the resources that are working on the COLs are the same ones that would
15 go to the workshop. So we're recommending that if we could put it in December or
16 November/early December, that would allow our staff to complete quality
17 submittals to come in. We think it would enable a more constructive dialogue.

18 There is multiple ideas that docketing the meeting reviews as they're
19 submitted, doing some other actions in the process, as we would prepare our
20 submittals the same way as you would do the review or issue the environmental
21 impact statement, may be beneficial. Right now, we see that they are different
22 which would cause the staff or the contractors and the staff to have to duplicate

1 activities. We would like to continue with the workshop concept and think it would
2 be best in the November/December time frame.

3 The other area to focus on is the next phase of regulatory updates. The
4 interaction that we've had on the first group we think is very beneficial. We think
5 any changes to the regulation as David has mentioned should be based off of
6 safety experience technology advances. For a company like Exelon, we operate
7 17 facilities. Adding the 18th facility, we don't see the benefit of a totally different
8 QA program, QA manual, standards of operations, standards of conduct.

9 We would like to have consistency and if there is a driving need to change
10 for new plants it should be for the existing plants also. We'd like to hold to that.
11 The implementation updates should result in a more efficient process and reduce
12 burden and be less complex and just be focused on improving safety.

13 In near clear criteria for initiating a change to Reg Guide should be
14 understood, I think, by the staff and explainable before we would invest resources
15 on both sides going forward. I think, as I said, it would be beneficial for all of us if
16 we just focused on improving safety. With that, I'll turn it over to Marv.

17 MR. FERTEL: Just to sum up real quick on slide nine. If
18 Commissioner McGaffigan was here, I was going to say we like stability on the
19 requirement. We've been through like 263 Reg Guides and Standard Review
20 Plans, but the Commissioner has always advised me that what we should expect
21 is dynamic stability.

22 So what we'd like, as Chris just said, is maintaining the agreements that

1 come out of all the interactions over the last few years and make changes when
2 they're really safety based, not just my last good idea as we move into actually the
3 filing.

4 We have four major priorities that we're looking at. One is for us to get in
5 high-quality COLs to the NRC. Two is for us to work well with you on the design
6 certification process and make sure you're getting the information; what we'd like
7 on the other side is high-quality reviews and open communications. We do think
8 over the next 12 months it's real important to focus on the construction inspection
9 program and the ITAAC close out program.

10 As it was mentioned, those are areas where executives are less certain
11 about how the process works and it's the areas where you've actually been
12 investing a lot of money and you're trying to make sure you're getting sign-offs' as
13 you go and the process works well. So the better we can define that to make it
14 work the way it should work in the regulatory process and then we can explain it to
15 the executives that we think the better decisions will be on new plants.

16 David talked about the three rulemakings that we really think are important
17 to get finished; the LWA, 73.55 to get it done and the aircraft assessment. I would
18 also encourage, and I know Part 52 is probably just about to come out as soon as
19 you do the impact statement on publishing something that's 1800 pages long.
20 Again, I would encourage you to get Part 26 out as soon as you can because I
21 think that would be very helpful to the submittals.

22 And the last item as a priority, we would encourage the Commission to

1 consider going forward and updating the rulemaking on waste confidence. We
2 see the next 12 months - the EDO had made a comment to us at a meeting we
3 had with him that he saw this period coming up as very important for credibility;
4 credibility from our standpoint of submitting things we said we're going to submit.
5 Submitting them of the quality that we said they would be and then obviously he
6 was saying on his side the NRC to do their review.

7 We see that very important to provide confidence to all stakeholders, be it
8 the public, the boards of directors or the political process, all of which are watching
9 to see if we can actually move forward successfully on this. We are committed to
10 doing that. We're committed to engaging with the staff. We're pleased with the
11 way they engage and we'll just say let's just keep it up. Thank you.

12 CHAIRMAN KLEIN: Thank you very much. What we'll do is hear
13 from Mayor Knapik and then we'll start our round of questioning after that. Mayor?

14 MR. KNAPIK: Thank you, Chairman. Mr. Chairman, Commissioners,
15 thank you for the opportunity to talk to you today about the impacts of new nuclear
16 units in Matagorda County. Go to the next slide please.

17 I'd like to show you just a brief overview for those of you who have never
18 been outside of Washington and visited our great state of Texas exactly where
19 STP is located. As you can see in the upper left-hand corner, the picture of STP
20 site in relation to the Houston metro areas, about 80 miles southwest of Houston
21 and the map right below that is a map of Texas.

22 You can see we're located in south Texas and to the right there's a slide of

1 Matagorda County. You can see we are a coastal county. We're very flat. We
2 have some great resources there, but that's in relation so you'll understand exactly
3 where we are. Next slide, please.

4 Matagorda County was first settled in 1826. We are part of Stephen F.
5 Austin's original land grant colony. As I mentioned before, we're very flat. We're
6 on the coastal plains and we're glad to be here today because just a couple of
7 days ago we were worrying if hurricane Dean would come calling, but luckily we're
8 here.

9 As I mentioned, we're close to Houston and Austin and San Antonio are just
10 a three hours driving distance. Matagorda County is currently home to 39,000
11 hard working residents. Bay City and Palacios are the two incorporated cities in
12 the counties. There are numerous other unincorporated communities; there's
13 Sergeant and Palacios and several others that -- and Sergeant and Matagorda
14 are right on the coast. Matagorda was the county seat at one time until numerous
15 hurricanes forced us to move the county seat inland. So Bay City is now the
16 current county seat.

17 If and when new construction begins, we will take most of the construction
18 workers and hopefully the newest upper management team when operations
19 begin. Our economy is basically based on agriculture. We are blessed with good
20 soil, so rice has been the prominent crop in Matagorda County for the past
21 century. In fact, there is a series of rice canals that crisscross our county, so it
22 allows the rice farmers to irrigate their crops. We also have grain, sorghum, cattle

1 and turf.

2 We also have in addition to the STP plant we have two petrochemical
3 plants in Matagorda County. We have the Lyondell plant and the OXEA plant,
4 which is formally Celanese. Next slide, please.

5 Some of the key impacts from the new plants are housing. The city is
6 currently working with five developers for new subdivisions. Bay City hasn't had a
7 new subdivision built since the late 1880s when units one and two came on line,
8 so our housing economy has been depressed. We're excited. We're looking at
9 new developers.

10 We think a lot of folks when they heard the news that STP had announced
11 plans - or NRG had announced plans to put two new reactors in, the rush is on to
12 Matagorda County.

13 Our schools are in excellent shape. We have four independent school
14 districts in the county. We have Bay City Van Vleck, which is a community to our
15 east. We have Tidehaven, which is to our west and Palacios. They're all
16 independent school districts. Bay City is the biggest, obviously.

17 We just finished construction of a new high school in 2001. And having
18 spoken to the superintendent of the Bay City ISD about the expansion, they're
19 excited about accepting new students. They're always looking forward to it
20 because more students mean more Federal dollars. So they're excited and we
21 can handle the average daily attendance as you know. We're excited about that.
22 We're ready for all these people to come in.

1 Traffic: The city just completed the first phase of a bypass around the
2 community. We did this with our own local funds. There were no Federal or state
3 funds. We built an overpass over the railroad tracks by ourselves and now we're
4 in negotiations with the landowner for Phase 2. Phase 2 will be greatly beneficial
5 to all the construction workers coming in from the east side of our community.

6 The first phase is already beneficial to those coming in from the West
7 because we suspect they'll be coming from all over. We want to make sure that
8 they have great access to the plant and also help ease construction schedules.

9 Also the city three years ago passed a \$6 million bond issue so we can
10 repave all 78 miles of roads in Bay City. We're currently in the process of doing
11 that. It's been a big project. When the city passed the bond issue, we got a great
12 interest rate so we were able to go out and buy our own equipment. So in effect,
13 we act as our own contractors.

14 We have city crews who are maintaining the roads and we're getting a lot
15 more mileage than hiring a general contractor because all workers are city
16 employees, so we have better control. We're pleased about that.

17 Our infrastructure: The city is in great shape. We built a new waste-water
18 treatment plant in the mid-1990s. The capacity of that plant can service over
19 40,000 homes. Right now, we're at half capacity, so any new homes that come on
20 line with the expansion of the two new units, we can handle that.

21 We also have a plan to rehabilitate our ground and elevated water storage
22 tanks. We'll begin work on that this coming fall and then we have an elevated

1 tank. We received a grant to rehabilitate. We're the first one in the state of Texas
2 to receive a grant to rehabilitate an elevated storage tank. As you can imagine,
3 being 20 miles from the Gulf of Mexico standing 200 feet near it, it gets great
4 exposure to salt. We're going to rehabilitate that tank next year.

5 Water system is in excellent shape. We're constantly working on that.
6 We're currently in the process -- we've signed a contract to create a wireless
7 broadband mesh network for all the citizens of Bay City and hopefully if that works
8 out, we can expand it out to the entire county. Those were some of the things that
9 are important to the infrastructure of our community. Next slide, please.

10 Education: Mr. Crane talked about education and the growing concern of
11 the skilled work force. Bay City working with STP and Matagorda County are firm
12 believers in education. In order to achieve those goals, we formed what we call a
13 Mid Coast Educational Alliance. It's comprised of all four independent school
14 districts. We have Wharton County Junior College, which is located 26 miles to
15 our north. They're a player.

16 We have The University of Houston at Victoria which is 75 miles away. The
17 University of Victoria Brazosport College which is located in Lake Jackson, 45
18 minutes to our east.

19 Along with industry leaders Lyondell, OXEA, and community leaders, we've
20 been focusing on creating jobs, not only for the coming work force, but to replace
21 those who will be retiring in the coming years. The median age right now at STP
22 is approximately 49. So in the next few years, all those jobs will need to be

1 replaced as well.

2 Mr. Crane talked about a job fair. We hosted a job fair for all high school
3 seniors in mid-May. It was packed. We're working with the folks at STP. They
4 gave away two internships. I was lucky enough to pass out applications and every
5 student -- you know most high school students will take a piece of paper and kind
6 of walk away, but these kids were very interested. I think once they realize the
7 potential here that they have for jobs and that's been our biggest problem is what
8 we call brain drain.

9 Too often in small communities once kids graduate from high school they
10 go off to a major university, they graduate and then they go where the jobs are.
11 They go to the major cities like Dallas, Houston, San Antonio, Austin and the only
12 time they come back to Bay City is to see their parents. We want to stop that. We
13 want to create the jobs. Not only are we looking at the nuclear industry, we're also
14 looking at petrochemical and all the trades as well. That's the purpose of the Mid
15 Coast Educational Alliance.

16 High paying jobs, a clean industry; that goes without saying. Any
17 community would love to have what we're about to get with the two new reactors.

18 Economic growth: All I can say as the mayor its been a real pleasure
19 working on this year's fiscal budget; for once we have extra money. Our sales tax
20 has gone up by almost 12% from last year and we're excited about that. There's a
21 new sense of excitement in the community when NRG announced that they were
22 coming with two reactors. We experienced a great boom and we continue to hope

1 to ride that.

2 We had a Super Wal-Mart locate in town. I know that doesn't sound like a
3 lot to folks, but we're happy to have them there. We also got a Chili's. For a small
4 town of 19,000 people, having a Chili's is just great. So we've got a couple more
5 retail opportunities that are going to happen, too. I think everybody's excited about
6 what's going on.

7 Emergency Preparedness: I can't say enough about emergency
8 preparedness. Just this past weekend, once again our emergency operations
9 center was opened in preparation should Dean make landfall. Two years ago
10 when hurricane Rita was knocking at our door, for a week Matagorda County was
11 the target. We assembled an EOC and went through the plan established with our
12 friends at STP. We had an orderly evacuation for Matagorda County. There was
13 none of the horror scenes that you saw from Houston. Our plan works. We drill
14 constantly. We have a graded exercise every other year and we also have a non-
15 graded exercise. So we're constantly drilling. Every time we open the EOC, every
16 person in that room knows exactly what that role is. I think that's one of the major
17 benefits.

18 After hurricane Rita, the state of Texas decided to take a look at their plan
19 and we would go to various meetings up and down the coast and we would tell the
20 other EOCs what ours does. You're so far ahead. We say its thanks to our goods
21 friends at STP for helping us get ready.

22 Corporate support: I can't imagine life in Bay City or Matagorda County

1 without STP. The employees sent out city councils, they are members of our
2 economic development boards, their Port Authority, school boards. They're great
3 corporate citizens. They support our Cancer Society, Relay for Life, the March of
4 Dimes, Walk America, the county fair and livestock show. They're always there.

5 Prior to being elected mayor, I served as president of the local Chamber of
6 Commerce for 12 years and any time I needed a sponsorship for anything I know I
7 could call STP and they always stepped forward. I think the greatest corporate
8 responsibility that STP is.

9 If you go to the next slide, this is a picture of our brand new regional training
10 center. This building that you're looking at was an abandoned K-Mart. Its 90,000
11 square feet. Our city community development corporation purchased the building
12 and took out a note for the sole purpose of housing the leadership for Units 3 and
13 4 on the left-hand side as you face it. And on the right-hand side, Wharton County
14 Junior College will be locating their process technology and their power
15 technology.

16 This is a joint venture that started out through the Mid Coast Educational
17 Alliance and we just opened the building two weeks ago. Classes begin next
18 Monday. I know STP took possession of their half of the building April 1st. And I
19 want to say the city contracted with the community development corporation. We
20 did all the work. We were done in record time. They purchased the building in
21 October; November, we commenced work. On April 1st we handed the keys to
22 STP on their side of the building. It's a fabulous facility.

1 I'm happy to say that STP once again showed their support. They provided
2 a \$1 million sponsorship and it's going to help fund the college. So they are
3 committed. They are truly great corporate citizens. I cannot imagine --and I know
4 it will only improve when Units 3 and 4 are located there. And as the mayor, all I
5 can say is everyone in Bay City and Matagorda County is excited about having
6 them there. Thank you.

7 CHAIRMAN KLEIN: Thank you very much for both the industry and
8 mayor. We appreciate you coming in. Obviously, having been down to that part of
9 the country, it is flat down there.

10 MR. KNAPIK: Yes, it is.

11 CHAIRMAN KLEIN: One of the questions, are you going to have to
12 expand the Blessing Hotel for all this?

13 MR. KNAPIK: No, sir. That's listed on the National Register of
14 Historic Places and we have to be very careful with what we do with that hotel. It's
15 an old hotel built in Blessing, I think, in the mid-1880s, I think. The name Blessing
16 is unique for itself. Shanghai Pierce founded the town and he wanted to name it
17 "Thank God", but the railroad would not let him, so they made him name it
18 Blessing. True story. Shanghai Pearce is buried in Holly Cemetery and he built a
19 20-foot statue of himself. As you pull into the cemetery, it's the first thing you see.

20 CHAIRMAN KLEIN: That's good. How does a community like Bay
21 City handle the transient work flow? In other words, you'll have a lot of people
22 come in and after the construction; they tend to move off to the next site. How do

1 you handle that?

2 MR. KNAPIK: Back in the '80s we had numerous apartment
3 complexes built and they're still there. They're being renovated because they
4 realize what's about to happen. We're hoping -- I'm sure there will be some -- we
5 have an ordinance now on the books about trailer parks, but we're hoping we can
6 get some new apartment complexes and hopefully they'll fill the older ones as well,
7 too.

8 We look forward to that and we realize that when NRG made the
9 announcement, we realized immediately the challenges that are facing our
10 committee; the housing, the infrastructure, the school district. We've been
11 meeting regularly to meet these challenges. We're afraid that it would pass us by
12 because we were not ready, quite frankly, in the '80s when STP built the work
13 force out there, it was over 14,000 people, which almost equaled the population of
14 Bay City. I think we're in better shape.

15 We have a great leadership team in place now with our county judge, the
16 mayor of Palacious, the school districts and everybody else, the economic
17 development people. We are working diligently to handle these challenges.

18 CHAIRMAN KLEIN: On your Wharton College extension program, do
19 you do a lot of training for the skilled craft there?

20 MR. KNAPIK: We hope to in the future because right now with the
21 housing boom we expect there are no carpenters, no plumbers, electricians. We
22 hope to start working on building up those trade classes. I was really encouraged

1 to see the job fair and also the internships where people could have a chance to
2 work for two weeks at STP and see what goes on out there.

3 We've just not had -- we've just been in this economic doldrum basically for
4 the past 10 years. Now we are starting to come out of it and like I mentioned
5 earlier there is a new sense of enthusiasm and pride in our community. We're
6 looking forward to handling anything that's thrown our way.

7 CHAIRMAN KLEIN: Great. Thank you very much.

8 MR. KNAPIK: Thank you, Mr. Chairman.

9 CHAIRMAN KLEIN: Marv, I think on the Part 26, maybe a clarifying
10 question. Will those be published in December? Is that the latest schedule, Luis?

11 MR. REYES: Luis Reyes, I'm the EDO for the NRC. We have a
12 detailed schedule. We are doing changes, conforming changes to the Reg
13 Analysis based on the last change the Commission made to the rule. We're trying
14 to incorporate the site visits information that we have. Our schedule is to have the
15 rule delivered to OMB early in December and expect to have approval from OMB
16 in February time frame for a final issuance in March of '08. We'll take a hard look
17 and see if that schedule can be improved.

18 CHAIRMAN KLEIN: Thanks. I think, obviously, we're working on that
19 one quite rapidly, so we'll have a dialogue to make sure that we stay on top of that
20 one. I want to make sure that you knew what that schedule was.

21 MR. FERTEL: Thank you.

22 CHAIRMAN KLEIN: One of the questions that I'm a little surprised

1 that on your comments about the hearing process in the COL. We talk a lot about
2 standardized processes and so we want to standardize the reactor, so we want to
3 standardize our process. We have the ESP process and we have the COL
4 process. And now we're hearing we want to modify the COL process and I guess
5 I'm surprised why is that now coming up that you want a hearing on the
6 environmental so late in the process because we've scheduled people and I guess
7 it seems to me that that's a curve ball that's thrown at us. Why are we just now
8 hearing about that?

9 MR. FERTEL: I think, Mr. Chairman that what it is is it's a fact of life
10 and how this whole new plant situation has changed. It's not very long ago that
11 the only reason people were preparing the reference COLs was to test the
12 licensing process and nobody was looking to go forward and build plants. Now we
13 have 17 companies that are seriously considering building plants. Those
14 decisions are still to be finalized, but they are very serious about looking to do it.

15 What's driving some of the thinking now is I'm building the plant to meet a
16 demand in a certain year. It's 2015 or 2016 or 2017 and it's no longer I'm going to
17 build a plant, when it's done it gets on line. I need it by that year or I need to make
18 another decision. The other decision could be I'm going to build something else or
19 I'm going to buy power and everybody I think is trying to use efficiency to decrease
20 demand.

21 But given the change in the nature of the decision process that the
22 companies are in, people are now saying, "Okay if I want the plant on line by 2015,

1 how can I shorten the overall project schedule?" As I said, ideally and practically,
2 what you'd like is people to go with an ESP, have a certified design and just follow
3 the COL. We're not in that position for number of licensees.

4 I know that Calvert would like with their submittal for a hearing and I think
5 that what's driving them is they've done an analysis of the schedule and what they
6 see is if they get the environmental hearing behind them, they can then file for the
7 LWA. They can do the pre-LWA stuff once the rule is out. They can file for the
8 LWA at that point because they got the environmental hearing behind them and
9 then they can actually get the project completion schedule shortened.

10 Even as I said earlier the licensing may even be a little longer. I might not
11 get the COL as quick, but I can do the LAW portion of it before. I'm not sure I'd
12 call it a curve ball. I think it's an idiosyncrasy of the change from we're just trying
13 to test the process to we're actually now seriously trying to build plants. We're
14 trying to get them built in a period of time and I think it's more - I don't want to use
15 creativity in looking at the process, but it's more with the new LWA rule and with
16 the stuff I can do before the LWA; if I can get all those things in place, I can
17 actually shorten the project schedule.

18 In the future, I think you're right. You probably won't see people asking for
19 this on any sort of routine basis. I think you'll see them bank their ESP. They will
20 have a certified design. You'll see the process go forward in a much more
21 predictable and orderly fashion. But now I think you're seeing people trying to
22 figure out how do I actually build quicker and stay within the rules, but do things

1 that allow me to build quicker. I don't know, David, if you want to --

2 CHAIRMAN KLEIN: I was going to ask David. With North Anna, you
3 came in with an ESP and so I guess that was the intent to have that environmental
4 hearing and lay those to rest in that phase and then do the COL. You've done
5 that, so I guess I'd like to hear your comments as how has that worked.

6 MR. CHRISTIAN: It's worked very well for us. If I could add only
7 anything to what Marv had said as far as how it might impact others, it looks to me
8 like the Energy Policy Act of 2005 is doing exactly what it was intended to do and
9 bring people into the market and get construction under way. For us, the ESP
10 process has worked very well.

11 CHAIRMAN KLEIN: I guess I don't quite understand why the ESP
12 process doesn't work for others.

13 MR. FERTEL: It does. But keep in mind even when Dominion went
14 forward with the ESP they were testing the process back then. They had not even
15 --

16 CHAIRMAN KLEIN: I thought they had great insight.

17 MR. FERTEL: I would certainly say they had great insight, but again,
18 I think that what's happened, Mr. Chairman, is people have gotten really focused
19 on building the plants. They are saying I'm in the process now. If I filed an ESP,
20 it's not where I want to be. I want to get my COL in or I can't make a 2015 or
21 2016. So they're looking at what can I do to deal with that change in their
22 situation, to be honest. That's why I don't think I would look at this as the future.

1 I'd look at it as maybe a necessary condition to transition from I'm testing
2 the process to I really want to build to I'm actually now in a process where I'm
3 going forward more orderly and look at it almost that way.

4 MR. CRANE: We have two preliminary sites that we're evaluating
5 currently. There is a plan that we would anticipate going ahead with the COL filing
6 on one site and that's the site that would be constructed early on. The second site
7 we would potentially start the proceedings for an ESP to have it ready in the future
8 as demands come in place so it falls in exactly with what Marv has described.

9 CHAIRMAN KLEIN: Okay. Well, I think we'll have another round of
10 questioning, so we'll shift now to Commissioner Jaczko.

11 COMMISSIONER JACZKO: A couple of points to make. I think from
12 very early on in this process I think we had a meeting -- I can't remember, it was
13 probably a year-and-a-half or so ago and I said it would be nice before we start
14 talking about how we're going to change the process, we could somebody that
15 actually uses the process.

16 Right now we're going forward. We have not a single certified design that
17 will be referenced in a COL application. We have some early site permits that
18 have been issued, but very few applications that will be used in an actual COL
19 process. I went through a list of those applications and new reactor type things
20 that we have received and almost every single one of them has required delays
21 and modifications and updates on the part of the applicants. I can go through that
22 list. I was working to compile it and there were several.

1 Clinton and Grand Gulf are the two ESPs where I think we did them
2 relatively on schedule. The recent Southern ESP submittal, that I think had to be
3 resubmitted because the original seismic analysis was not the standard seismic
4 analysis that we were using for all the applications.

5 The GE ESBWR, originally the schedule was for the staff to issue an SER
6 in October 2007 with open items. That has been completely changed. We have
7 eliminated that as a milestone because there have been problems with getting
8 responses to RAIs.

9 Westinghouse, we originally certified that design in 2005. There are a lot of
10 incomplete items. They recently submitted an amendment to that. The staff -- it's
11 my understanding has sent a letter indicating that that submittal, the amendments
12 to that were not complete and need to be sent back and they cannot docket it at
13 this time because of those changes.

14 We, I think, are in a similar situation with the very environmental report that
15 we've been talking about wanting to be in processing a hearing notice on. It's my
16 understanding that that submission is not complete and likely we'll be sending
17 back information saying that we cannot docket that at this time.

18 North Anna - we're familiar with the problems with the Coastal Zone
19 Management compliance there. That required a submittal of a supplemental EIS
20 in that case. All of the major activities so far, I am seeing problems on the
21 applicant side in meeting the quality standards that we have asked for.

22 And so I'm a little bit concerned when what I hear are further efforts to

1 accelerate to ask the Commission to further modify its procedures and processes
2 to do these things faster when the things we're getting are not of the quality that
3 we've been expecting. We're not able to submit. We're not able to get these
4 applications. We're not able to review them and have them submitted in a way
5 that they meet our quality standards.

6 There's not really a question in there, I think, so much as just a statement.
7 Right now as I said, there is no completed design certification that will be
8 referenced in a license application coming in the end of this year. We will be doing
9 all of those concurrently with the COLs. We have a situation with the ABWR
10 where we're anticipating 17 tier one and tier two star design changes for the
11 ABWR. Again, that design certification will not be complete and utilized as it is.
12 So I think we need to take a step back here and just recognize that there's a lot of
13 work to do.

14 The issues we shouldn't be focusing on are how we can accelerate right
15 now. The issues I think we need to focus on -- and I have to take this phrase from
16 Chairman Diaz and I can't quite get the accent right -- but it was the intent was
17 there's got to be high quality submittals. I don't think we've reached that threshold
18 yet. I think more work needs to be done.

19 This is with tremendous levels of interaction with the staff with a lot of
20 back-and-forth. It's not as if these submittals come in without any consultation.
21 We're doing a lot of consultation, but still there are areas where they're not quite
22 complete. So before I'm willing to entertain any of these things and any of these

1 ways that we're going to accelerate this work, I want to see that threshold met. I
2 think it's an important one. It will be the most crucial and most important thing, I
3 think, for us processing these applications in a timely way.

4 I want to touch on another issue briefly on waste confidence. I would
5 certainly welcome a petition for rulemaking on that. I think if this is something that
6 the industry feels is important for us to begin processing on, I think the right way to
7 go forward would be a petition for rulemaking. I think it would be a good
8 opportunity for the Commission to test its ability.

9 We're working on trying to make these processes work a little bit better. It's
10 certainly one that I have said publicly I think the Commission should reevaluate
11 and I think we can reevaluate in a way that doesn't tie it quite so closely to the
12 uncertainties of a geologic repository, but nonetheless recognize that this is an
13 issue that I think is of the safety issues that we will address at any facility, storage
14 of spent fuel and particularly if we're talking about dry cask storage, long term is
15 probably one of the least areas of concern that I have.

16 So I think this is an issue we can address. I think fundamentally it's
17 something that we can take a look at, but I certainly would welcome a petition for
18 rulemaking and I think that can get the process moving in us working through that.

19 I had a series of questions. My staff did an excellent job of preparing
20 questions for me, but I've used up all my time. So maybe in the next round I will
21 have a chance to ask questions, but if you want to comment, please.

22 MR. FERTEL: I would like to comment on your statement about the

1 quality. There's no question what you raised are real issues and there is no
2 excuse from our perspective for low quality stuff coming in or not the high quality it
3 should be. So we'll work to try and improve that. We'll look at all of the issues that
4 have been experienced.

5 Some of it, and this is not excuse, I think it's a reality is growing pains.

6 There's a lot people doing a lot of things and I think that they're trying to get stuff in
7 and we need to figure out how to make sure that it does get the right eyes and it's
8 correct when it does comes in. We have an NPOC meeting next week and I'm
9 sure Chris who Chairs NPOC will in his way make it very clear to the expectations
10 that we should be meeting.

11 The only thing I would say about the idea of expediting and we're not saying
12 to expedite and there's only a few places were saying that, but to expedite to get
13 around anything. Believe me, that's not the intent. I wouldn't say you shouldn't
14 look at how you can do your part smarter and faster just because we haven't done
15 as well as we should on our part yet.

16 We'll get better, hopefully very quickly. If we don't get better, you'll bounce
17 it back. So having a more efficient process on your part should be ready for when
18 you get applications and submittals that are good. I would just encourage you not
19 to wait for us to get better to look at how you could do better. Let's both go in
20 parallel.

21 On a petition for waste confidence, we would certainly do that. One reason
22 we haven't, to be honest, is that we're concerned it just extends the time period.

1 That the process when you submit a petition to notice it and everything else and if
2 the Commission wanted to initiate it on their own accord it actually gets it going
3 faster. But if the only way we can get it going is to submit a petition, we're more
4 than glad to do that.

5 But we just thought that adds 60 or 90 days because you have to go out
6 and it doesn't add any more comments because once you decide to do it, you're
7 going to go through a rulemaking to get the comments. That was one of the
8 reasons we haven't submitted already.

9 COMMISSIONER JACZKO: If I could just comment on that. Had
10 you submitted 60 or 90 days ago, we probably would be at the same place we are
11 today. In any case, I certainly appreciate what you're saying, but my point is we
12 want to see the quality and we have to budget and we have to make preparations
13 and the only thing we deal with - this isn't the only thing we deal with as an agency
14 right now. We're developing resources to deal with all these applications.

15 My concern isn't so much because of the schedules or because of it taking
16 longer or taking faster, my concern is that we do a good job. Right now the quality
17 isn't there that I have a good sense that a thorough job is being done on the
18 industry side. And so I'm a little reluctant for us to open up avenues to further
19 accelerate things because I haven't yet seen - as you said the growing pains have
20 been resolved yet.

21 We're still somewhere in the area of adolescence -- I remember I used to
22 have all those terrible leg pains when I was growing up as you get taller. That's a

1 fact of life and you deal with and eventually you stop growing and your hair falls
2 out. You deal with it. At that point, you've gotten some level of maturity. We are
3 not there yet.

4 My concern has always been that this is being driven by external pressures;
5 by things that buffer a little bit the safety focus. Things like the Energy Policy Act
6 incentive. Things like the need for power. All of those aspects are real, but they
7 are things that can butt heads with the safety focus.

8 Our job fundamentally, at least in my view, is to make sure that the safety
9 focus stays. High-quality applications is one way to make sure and increasing our
10 focus on the acceptance review has been an opportunity for the Commission at
11 the front end to really make sure that the applications are what we want to see so
12 that we all have a good sense that you have looked over everything because in
13 the end we cannot look at every aspect of an application. We can't. It just doesn't
14 happen.

15 There's a tremendous amount of trust that goes into the work and the
16 applications that come in. As I said, I have some questions that hopefully I'll be
17 able to get to in the next round.

18 CHAIRMAN KLEIN: Commissioner Lyons?

19 COMMISSIONER LYONS: Well, thanks to all of you for very, very
20 good presentations. To our three colleagues from industry, Marv, Chris and Dave,
21 we certainly -- you've spoken to us before and we appreciate the continued
22 information. And to mayor Knapik, we really do appreciate your making the

1 special effort to come and, as with you, we're very happy the hurricane moved in a
2 different direction. But your comments were very, very interesting.

3 One of your comments in particular you spoke to the emergency planning
4 and preparation that you have in Matagorda County. It reminded me that last year
5 I went to visit the Waterford plant which had been right in the path of Katrina.
6 That's right next to New Orleans. The contrast at St. Charles Parish with
7 Waterford compared to the devastation in New Orleans, was just night and day,
8 and as I spoke to the emergency planning folks there, they made the same point
9 you made that because of the proximity of the Waterford plant and a number of
10 chemical plants, they had a very well exercised emergency plan. They used it. It
11 worked. The damage there from Katrina was truly minimal. Your comments very
12 much resonated with my experience.

13 Just by way of a specific question, I think we're always seeking at the
14 Commission better ways to reach out to engage with local stakeholders. We try to
15 have public meetings in the vicinity of plants where construction is being
16 contemplated. I'm just curious if from your perspective you see ways from an
17 agency standpoint we could be improving our outreach to the local areas like
18 yours that are likely to have substantial impact?

19 MR. KNAPIK: I would only echo what the gentlemen from the
20 industry have already said. The town is excited. We would like to have the
21 process sped up, but after listening to Commissioner Jaczko, obviously we want to
22 have safety as our foremost thing.

1 I think constant communication between the NRC and the community - I
2 don't know how this could be achieved through the regional office. We have a
3 regional office in Arlington. Telling the community where the NRC is and where
4 we are in this process. Too often, it was like when we had the announcement. It
5 was here and then all of a sudden everybody expected the construction to begin
6 the next day. We all know that's not true.

7 People still have a hard time getting their hands around the plant won't be
8 on line until 2013 or 2015. I think it's such a long process, that if there were some
9 kind of timetable we could say STP has submitted their COL right now. I think just
10 constant update; some kind of press releases or small town hall meetings.

11 I know the NRC held its first town hall meeting with the community back in
12 June, which was very well attended. I was pleased to see a lot of my fellow
13 citizens turn out. We're excited about it. We're also concerned that we have a
14 quality product. I'm sure we will because STP has proven itself. We're looking
15 forward to it.

16 If there was some way - I'm not exactly sure you could work it out, but if the
17 citizens can be informed of what's going on. A lot of that falls on our shoulders as
18 local elected officials because we're in contact with senior management, but if
19 there were some way the NRC could aid us in that process of giving us updates of
20 what's going on in the process. Does that answer your question?

21 COMMISSIONER LYONS: Yes, it does. I think we need to carefully
22 consider your comments. I'm pleased that we've had the first public meeting to the

1 extent that we can find additional ways to communicate, I think you'll find strong
2 support from the Commission.

3 MR. KNAPIK: I know the community would welcome it too because
4 all eyes are focused on what's happening down there. As I mentioned in my
5 comments, it's been such a long time since we've had an economic spurt and this
6 thing is just a really great impetus to our county.

7 COMMISSIONER LYONS: That's great. I, too, will be interested in
8 the second round of questions, but if I could just use the tiny bit of my time left with
9 just a few comments.

10 Marv, you went through the key policy issues. I very much agree with your
11 interest in affirming the waste confidence position. I'm not personally convinced
12 that it takes a petition, but if that's what it takes, okay. I'd be very comfortable with
13 the Commission moving ahead to reexamine waste confidence. And again, as
14 you noted, certainly in the process we'll be soliciting public comment.

15 Your point on recognizing the emergency planning adequacy for a new unit
16 at an existing site, again, makes sense to me. Your comment - and I certainly
17 agree with publishing the Part 26 rulemaking, your comment on notice of hearing
18 and docketing a portion of an application, I've got to admit I've got questions
19 about.

20 To some extent, sharing the questions that my colleagues raised, but I
21 guess what's also in my mind is wondering how you decide what to docket. If we
22 start docketing pieces - now maybe we can agree on a really big piece like the

1 environmental piece - but I do worry that as we start maybe getting into a contest
2 is the wrong way of describing it, but I'm worried that if we start moving toward
3 docketing smaller pieces, there may be almost a feeling of a contest as to who's
4 going to get the next piece docketed.

5 And I also worry, and I think it's coming up in the one that we're looking at
6 now, where even though it's an environmental document, they end up having to
7 cross reference into the safety side, which we don't have yet. So you end up with
8 incomplete cross references and I don't know how you avoid that when you're in a
9 situation like this. So I hear your interest, but I do have some concerns. I don't
10 know if you'd want to speak a little bit to that.

11 MR. FERTEL: We agree and I don't have a precise answer to your
12 question, but we totally agree with the concern about this shouldn't be a gaming
13 system of I'm going to docket a partial application and I'm going to have 12
14 portions that I'm going to run through at different times and try to do it. It's got to
15 be a legitimate part of the process and it ought to be something that stands
16 relatively stable on its own.

17 What we would encourage, if the Commission is open to considering partial
18 hearings, that we engage with the staff in a meaningful, and others stakeholders,
19 in a meaningful discussion to make sure that what is proposed for hearings passes
20 a test that says that's a legitimate thing. You could have a hearing on it.

21 We actually had that discussion because we don't want to end up in a
22 situation where I'm sending in Chapter 12 and asking you to hold a hearing on

1 Chapter 12 because I don't have the rest done yet. We are not at all proposing
2 that kind of situation. And again, I'll say it again, this isn't the ideal. This isn't the
3 way we would see the process working in the future.

4 We believe it may be a necessary accommodation done right for this sort of
5 first wave that's trying to meet and very sensitive to Commissioner Jaczko and
6 believe me, we'll have discussions next week and probably between then and next
7 week on performance and the submittals of stuff to make sure that they are
8 complete.

9 If the Commission is open-minded to at least considering what we are
10 proposing, we encourage discussion with the staff and other stakeholders for the
11 staff to come back to the Commission and say here's what a partial submittal
12 ought to look like and we the staff would be okay if they submitted this knowing
13 that that could go forward in some sort of hearing process.

14 COMMISSIONER LYONS: Well, put me down as open-minded,
15 skeptical, but quite willing to entertain discussions with the staff to see if there can
16 be a path forward.

17 MR. CRANE: A large driver on this is economics. I don't think we
18 would ask without a lot conversation with our colleagues, we would ask to do
19 much besides environmental. Environmental is part of our bigger risk in the
20 process. We believe as individual companies start to invest hundreds of millions
21 of dollars into long lead parts, construction planning, we need to have a level of
22 certainty that the largest hurdle to get over is the site specific environmental

1 impact. I think that's where the driver starts to come from.

2 We'll have some more conversations to make sure we police ourselves and
3 we're not trying to bring in individual chapters, but maybe we would come back
4 with a more formal industry position and statement on what we are looking at and
5 what's the basis in value or impact to us. As Marv said, we take your comments
6 very seriously. We have been trying to police ourselves.

7 I think we've got some of the participants that have been your focus on a
8 better plane now and we're continuing to try and manage that, but it's a message
9 that we'll take back to the rest of the industry.

10 CHAIRMAN KLEIN: I think we're open, but skeptical.

11 MR. FERTEL: We understand.

12 CHAIRMAN KLEIN: There is a process called the early site permit
13 that addresses exactly what you're commenting on. I guess I can be convinced,
14 but I'm not convinced yet. I thought we had a very clear path forward to answer
15 the questions that you had raised, but if we need to modify it, I'm open but
16 skeptical. I think we need to be convinced and articulate it.

17 If you all can lay out a good case for the staff, the staff could come up to us
18 with the recommendation, I think we'd all consider it. As Commissioner Jaczko
19 had stated and as I have stated in my speeches, high-quality applications will
20 result in, I hope, a timely response from the Commission. And if we do need to
21 change things, it should be clear what we are doing and why we're doing it.

22 Like I said earlier, I thought we had that process, answered the

1 environmental questions, called the ESP and then the COL. So I think if you all
2 can articulate what objective you're trying to achieve and how you can do it and if
3 we can do more efficiently with no compromise on safety, I think we'll consider it.
4 A good quality argument will help.

5 MR. CRANE: From an investment standpoint and a scheduling and
6 planning standpoint, the ESP process would be the most favorable for any of us to
7 go through. You have a level of certainty and then you can go on with the other
8 regulatory filings in the investments you have to make. But the majority of the
9 applicants that are not partaking in that are going forward for the COL is mostly
10 because of grid requirements. The Energy Policy Act gave certainty to allow the
11 financing.

12 I don't think there's one company going forward because of the incentives.
13 It's going forward because the insurance and the certainties and with the battles
14 that we're having right now between coal, the expensive gas on our customers and
15 now the viability and the economics of this technology, it's the best choice.

16 We all have significant issues coming up in the mid part of 2015, 2018 that
17 have to be addressed. That's why we're somewhat adjusting what would be the
18 normal approach.

19 CHAIRMAN KLEIN: Thanks. One of the questions I had for you,
20 David, is on page five you had a whole series of open issues requiring closure. Is
21 there a path forward for closure?

22 MR. CHRISTIAN: I just want to say that I think we just need to work

1 at it, but the industry and the NRC and I think the dialogue and progress in the last
2 ten months has been outstanding. If we continue to have - and I especially, again,
3 wanted to reiterate the thanks for the focus that has been provided by the
4 Commission on Digital I&C and resolving that. I think it's a matter of continuing
5 dialogue and working these things to closure. There's nothing insurmountable
6 here. But in particular, credit to the Commission on focusing folks on Digital I&C
7 resolution.

8 CHAIRMAN KLEIN: Thanks. Chris, I noted that you were
9 commenting on you'd like a workshop shifted. My guess is the dilemma that we
10 have is that it's the same people that would be attending the workshop will be
11 reviewing that item that would be coming.

12 MR. CRANE: That's a very good point. Maybe it's somewhere in the
13 middle.

14 CHAIRMAN KLEIN: We'll go to Commissioner Jaczko and then will
15 shift to Commissioner McGaffigan. Commissioner Jaczko?

16 COMMISSIONER JACZKO: Thanks. I just want to briefly comment
17 on the issue of the hearings on the environmental report. The other factor, of
18 course, we have to consider is we have this out for comment right now. We have
19 a draft policy statement on the hearing process. I think we've already received
20 some comments I've seen from other participants in the hearing process. We also
21 have to be sensitive to how other people would be involved.

22 I think we have to be sensitive to not creating a process that becomes

1 overly burdensome for interveners to participate in something they have a
2 statutory right to do. I think it's a broader discussion how we structure the
3 hearings than just with potential applicants. We also have to keep in mind the
4 schedules and the resources and the ability of interveners to participate fully. It's
5 just another aspect I think is important.

6 I was interested - certainly if you could expand a little bit more on the
7 emergency preparedness aspects. Clearly, for existing sites, where there is an
8 existing emergency plan and a program that's in process that clearly we have a
9 different situation than a green field site when it comes to the kind of review that
10 might be needed because obviously you have an existing plan that has been
11 certified.

12 I'm wondering if you've had discussions with FEMA or DHS. I'm not quite
13 sure which arm will be reviewing it, but if you've had discussions about them about
14 their sense of some of those issues.

15 MR. FERTEL: Just a very preliminary - we did meet with FEMA,
16 including Mr. Paulson and we did raise this issue with him and his staff. The
17 reason we're actually raising it here again is because we thought they were sort of
18 surprised and hadn't been thinking that way. We would like - I think from what you
19 just said, Commissioner, you tend to agree with our thinking which is if you've got
20 an existing site and you're adding another unit, you've got an active and we've
21 heard it from firsthand knowledge from the mayor sitting next to me and from
22 Commissioner Lyons' visit to the Waterford area, that we would probably have the

1 best preparedness around any facilities. What we'd like to do is make sure that
2 when FEMA is thinking about how they are reviewing, they're thinking in that
3 context and that if the Commission agrees with that when you have your dialogue
4 with the FEMA folks you can be raising it.

5 Obviously, for a green field site you're back to ground zero establishing
6 everything; there's no question. But for a brown field site, I think we see NRC
7 having a role in making sure the ALs are right and maybe the emergency
8 response organization, if it's different, and the facility itself obviously with its TSC.
9 But everything offsite has minimal, there may be some and we need to think it
10 through a little bit more, but minimal change and we just want to make to get that
11 on the table.

12 To be honest, if FEMA found a problem at an existing site, the basis for that
13 problem would be somewhat questionable in my mind because the basis for that
14 site being okay is the same basis for 64 sites being okay, which is their review of
15 the plans, the ongoing drills, the biannual exercises and the reasonable assurance
16 that it gives. So that was why we're raising it and I think you have a right. I think
17 you understand it.

18 COMMISSIONER JACZKO: It's certainly interesting and I'd be very
19 interested to hear what FEMA's take is. That ultimately is going to be crucial. We
20 do certain - EP is a little bit different, at least in my understanding, with some of
21 our other safety programs where to some extent we don't do the same kind of
22 ongoing review of plans, updating of safety systems and things like that to the

1 same level.

2 And so certainly the initial licensing review is a much more comprehensive
3 review, but of course, the underlying system should be one that works. So I
4 certainly would be interested in hearing what FEMA's thoughts are on that and
5 what their take would be on how to do that. I don't have any other questions.

6 CHAIRMAN KLEIN: Commissioner McGaffigan, you can have round
7 one and round two.

8 COMMISSIONER McGAFFIGAN: I've been trying to do this morning
9 what I used to do in the Senate; follow the hearing on the TV and sit at my desk
10 and work on the FY-2009 budget vote. So I apologize for that, but I did hear a lot
11 of it. I heard Marv talk about dynamic stability and all that.

12 MR. FERTEL: I'm glad I made that comment.

13 COMMISSIONER McGAFFIGAN: I'll just pick up on the conversation
14 as I've been able to hear it out of my right here, while most of my brain was trying
15 to write a vote. Waste confidence: I agree with my colleagues that we need to get
16 on with that. I believe that we need to get on with many of the rulemakings that
17 were outlined in the SRM on the Chairman and former Commissioner Merrifield's
18 COM. There was absolute unanimity on the Commission on the need for getting
19 ahead with these things; things like non-proliferation. We shouldn't have individual
20 licensing boards dealing with that contention that there's bad non-proliferation
21 results. There were several others.

22 But I think in some ways waste confidence is the most important, given the

1 total instability in the DOE program and the political arena. And it's one that I think
2 the Commission will be able to unanimously deal with. We just have to not be
3 reliant on Yucca Mountain opening in 2025. I don't think we need to be reliant on
4 that.

5 We need to be reliant on the Congress and the law that says that DOE
6 ultimately will take care of that. So I support that.

7 I did hear Dave Christian say he benefitted from the ESP process. I'll tell
8 you, I think the first three ESPs using the plant parameter envelope approach are
9 absolute failures. Nobody should ever follow that course again because I don't
10 think you're resolving very many issues at the ESP stage by having used the plant
11 parameters approach. I think Vogtle has by focusing on using the AP1000 at
12 Vogtle. It's doing the right thing and that's a better test of the ESP program than
13 the three heavily subsidized by DOE submittals that we got using the plant
14 parameter envelope approach.

15 I look at what's been resolved and what's been kicked down the road to the
16 COL hearing and there's vast amounts of things that are kicked down the road. I
17 don't know whether you'd want to say anything about that, Dave.

18 MR. CHRISTIAN: Comment noted.

19 COMMISSIONER McGAFFIGAN: The next item, I do commend the
20 ESBWR folks for declaring your unit the lead plant. I think that's going to help us
21 in terms of prioritizing budgets here and prioritizing our resources as they are
22 actually carried out. I think the things needed on the AP1000 applicants, I tend to

1 think even though that's not what the staff has in terms of time lines in its table, I
2 tend to think of Vogtle as the lead AP1000. It's certainly not Bellefonte because
3 Bellefonte, I think there's nobody who's going to build that. It's TVAs second
4 priority. It's Southern's second priority. It's all the participants in that effort second
5 priority.

6 I believe that it would be useful at some point -- you know even though
7 that's the subsidized one by DOE, it would be useful to say which of these is the
8 lead. I think Duke is going to because it's a new site. It doesn't have the benefit of
9 FEMA and DHS already having looked at it. It's going to be more complicated.

10 Progress I think is very serious at Harris and South Carolina E&G is very
11 serious at Summer. But you all figured out, not us, but I think it would be useful
12 because I believe what's driving this is that at some point we're going to have
13 budget execution problems. We are not going to be able to fund every application
14 at the same priority level. Part of it will take care of itself. We'll get quality
15 applications, but we need to sort that out. Again, I'm asking if you have any
16 comment on that; anybody who's involved?

17 MR. FERTEL: We'll have to discuss it, Commissioner, at the NPOC
18 meeting next week because I think there is some - because of the DOE funding of
19 the Bellefonte plant - there's some expectation on it being a reference plant. We
20 understand your comments and we'll discuss it next week.

21 COMMISSIONER McGAFFIGAN: It isn't just my comment. I think
22 many members of Congress have commented that they want NRC working on real

1 plants that are going to be making real commitments as opposed to plants that are
2 going to the process.

3 I remember the former Chairman of the House Energy and Commerce
4 Committee giving people a hard time on that matter. He's now the ranking
5 member, but he's a great enthusiast for this industry. If he sees us working on
6 theoretical plants as opposed to real plants, he probably wouldn't be happy. I just
7 mention that for what it's worth. I'm sure other members would have the same
8 reaction.

9 With regard to docketing partial applications, I think I agree. I'm not sure I
10 heard the whole conversation, but I agree with my colleagues. I'm comfortable
11 with what we put out. I'm comfortable as our draft policy statement. It's very hard
12 to work on an environmental report that's cross referencing without the safety
13 analysis and I know Constellation would like us to do that at Calvert Cliffs, but I
14 have a very hard time justifying doing that.

15 The best argument I heard for doing that is you'll smoke out contentions
16 early. But you get the same at the scoping meeting for the draft environmental
17 impact statement; you're going to get the same information as to what's bothering
18 the community that has concerns. So I don't think we get any new information that
19 way. I think it allows people to try to jump the queue in terms of getting
20 prioritization. And so just telegraph my vote, which I hope others have done.

21 I am unlikely to be very sympathetic to the argument you've made to
22 Constellation's request and its particular circumstance. I've used up my time. I'm

1 willing to let - why don't you just go ahead with whatever questions remain from
2 the other Commissioners. I'll catch my breath and then I'll think what else I wanted
3 to ask.

4 CHAIRMAN KLEIN: Commissioner Lyons?

5 COMMISSIONER LYONS: I was going to go to your slide five where
6 you listed a number of COL issues and just comment on one of them. I was going
7 to highlight the Digital I&C, which Chris, you just also commented on and the
8 Chairman just raised a minute ago, too.

9 I mainly want to put in a plug that's something I've been very interested in, I
10 think the whole Commission has been, is the possibility of a more focused national
11 approach to R&D in Digital I&C. There's a meeting coming up in September. I
12 believe the Chairman is speaking at it or speaking for it, I'm not sure which, in
13 which there will be an exploration of ideas that might lead to perhaps a multi
14 agency, perhaps a multi industry approach to recognizing I would say the country's
15 need to more carefully evaluate the challenges of Digital I&C.

16 I don't pretend that this impacts the current submissions, but Digital I&C is
17 going to be with us, I think, as far into the future as you can look. I think the
18 challenges are going to continue to evolve as the technology evolves.

19 So just a pitch that I hope that in the midst of all the frantic preparations for
20 COLs, there can be at least some industry attention to that meeting coming up in
21 Atlanta in September.

22 MR. FERTEL: Just a comment. The EPRI Nuclear Power Council is

1 actually meeting in D.C. this week and one of the items that we've asked them to
2 discuss and consider is for them to take a more holistic look at what is going on in
3 the R&D field, both from an industry, not just EPRI, across industry and across
4 national labs to see if we can't, for lack of a better word, catalog the various
5 substantive activities going on in the Digital I&C area.

6 Some of this was triggered by some statements Commissioner Lyons has
7 made in some talks he's given before.

8 COMMISSIONER LYONS: Not to belabor the point, Marv, but
9 perhaps even more important than what's going on in the national labs is what isn't
10 going on in our universities. I think there needs to be stronger university programs
11 in this area. Let me get to one quick question before I lose all my time.

12 I very much agree, Marv, that the next 12 months as you said are going to
13 be very, very challenging. That's certainly true at the Commission. We need to be
14 maintaining high-quality as predictable as possible in our time scales and our
15 evaluation of applications, but I think all of my colleagues have commented on the
16 importance of the quality of the applications coming in. There's been a lot of
17 discussion this morning on what you're doing to standardize applications and of
18 course we've had umpteen different speeches and discussions on the need to
19 standardize.

20 I'm just curious if from an industry perspective - I don't know if this would be
21 NEI lead or how it would be done - how is industry trying to police the quality - and
22 police may be the wrong word, so correct me if I'm wrong. What are you guys

1 doing to try to ensure the quality of not necessarily the two companies sitting here,
2 but maybe a company that isn't sitting here? I don't know --

3 MR. FERTEL: Obviously not enough for some of the comments
4 made earlier.

5 MR. CRANE: There's multiple industry forums that we have. The
6 primary for the AP1000 ESBWR NuStart. There's also working groups under NEI,
7 the new plant task force and the NPOC, which is the oversight committee that are
8 addressing those issues. We've had focused conversations with each one of the
9 suppliers in specific areas.

10 We will be getting to the point where we'll have the peer reviews of the
11 submittals going in for the site specific applications, COLs. We did have that
12 activity go on the ESP filings with the three companies that were in place.

13 We have some going -- I think your points are well taken and we need to
14 come back and show our methodology. I think most of the companies that are
15 involved are represented in the room and they'll have taken notes and they'll be
16 ready for our conversation with them next week. It will be through design centered
17 working groups, looking at quality of submittal, and then doing independent peer
18 evaluations to the base templates is the bottom line on the activities.

19 COMMISSIONER LYONS: I'm glad to hear use the word
20 independent peer evaluations because I think that probably could go a long way
21 towards giving you higher confidence in the quality and probably giving us a higher
22 quality application.

1 MR. CRANE: We'll have to address -- we have it in play right now for
2 two of the designs. We'll have to address how we would do that for the other
3 designs or get the commitment from those companies to embrace peer
4 evaluations as a potential technique.

5 MR. CHRISTIAN: While we are in this growing mode as its been
6 described, there is a tremendous amount of learning going on real-time just to
7 amplify what Chris said and just a tremendous amount of dialogue where we're
8 trying to learn real-time from each other these lessons.

9 COMMISSIONER LYONS: Thank you.

10 CHAIRMAN KLEIN: Just to amplify that. I think this is a worldwide
11 problem. It's not just a U.S. problem in terms of quality components. We've all
12 read the headlines of components or products coming out of China that have not
13 met standards. This is an area that I think we'll have to share with worldwide
14 colleagues and certainly the regulators who meet frequently, international
15 regulators, and we talked about how we can share information so that if we see an
16 issue that we can share that. The same thing I'm sure you'll want to do that with
17 your industry colleagues as well.

18 I think it's something we all have to stay tuned to that because we don't
19 want to see any fraudulent components. The major components are such a small
20 limited number of vendors out there for those, that's not going to be an issue, but
21 it's the sub sub vendors that I think we'll have to watch for.

22 Just a comment on Commissioner Lyons' Digital I&C issue. I think we really

1 do need a national program to look at how do we do that. How do we get the
2 universities engaged? How do we get the people? I'm sure if you go out and try
3 to hire a Digital I&C expert today, you'll find the pickings thin.

4 So we need to look at how do you get more people into that area. How do
5 you get the academic involved? How do you address issues that affect the
6 chemical industry, the nuclear industry and DOD? There's a lot of opportunities, I
7 think, for that activity.

8 MR. CRANE: The picking is hard for the Digital, but it's harder for the
9 analog.

10 COMMISSIONER LYONS: That's a good point.

11 CHAIRMAN KLEIN: Kind of like Novell and WordPerfect, right?
12 Commissioner McGaffigan?

13 COMMISSIONER McGAFFIGAN: I defer. Let me just ask -- I went
14 through my first round and hit it all, but one thing that I'm worried about as you all
15 put these applications together and I'd like to hear from you as to what you're
16 doing about this is are the people who work the current plants, the engineers
17 probably primarily, are they being diverted to the COL applications?

18 What walls are have you put in place to try to prevent that sort of thing from
19 happening? Because I do hear commentary from people that I know that there is
20 some danger at the current time of diverting people and not focusing on the
21 current plants' needs.

22 MR. CRANE: I can tell you our approach and let David fill in. It's

1 each company specific. What we have done is started to hire -- increase our hires
2 of engineers. Typically, we'll hire 100 graduates a year. We are backfilling the
3 engineers that are moving on. It's the same way we do our plant license extension
4 and the new plant will be done the same way. They'll be in our main engineering
5 offices working on the new product and they'll also be shadowing the new
6 engineers coming on. There's a couple months turnover period and they're the
7 mentors for those engineers. Our scale allows us to have that flexibility across the
8 10 sites and so it has not impacted us.

9 COMMISSIONER McGAFFIGAN: That's not typical and you're also
10 now working on a COL application to get in by September, unlike others. Dave
11 may be closer, although --

12 MR. CHRISTIAN: We actually don't have a huge number of
13 engineers working on it. We are working with some sub suppliers on the COL
14 application. We're not seeing that it's becoming a distraction. We have a fairly
15 small staff working on the COL and have been working on the ESP.

16 We recognize the potential for it to be a distraction for the work force and
17 we're constantly reinforcing the message --

18 COMMISSIONER McGAFFIGAN: Are they working at North Anna or
19 Headquarters?

20 MR. CHRISTIAN: Headquarters.

21 COMMISSIONER McGAFFIGAN: That's a good thing I suppose.
22 Are there people that were pulled out of North Anna to work at Headquarters or

1 were they new people?

2 MR. CHRISTIAN: As I quickly sort through in the Rolodex, I don't
3 think there's been any significant drain of people that has impacted plant
4 operations. Most of them were corporate based.

5 COMMISSIONER McGAFFIGAN: Mayor, do you have a comment?

6 MR. KNAPIK: Yes, Commissioner I do. I'm sorry you missed my
7 presentation, but the very last slide it showed that we renovated a K-Mart and its
8 90,000 square feet. Half of that building belongs to STP and that's the team that is
9 working strictly on Units 3 and 4. They're separate from the site.

10 STP realizes that the continued safe running of Units 1 and 2 is their
11 primary focus and so that's why we made a pitch to them that we would like to
12 house the team for Units 3 and 4 in town and thankfully STP agreed. They have a
13 great facility at a renovated K-Mart. I can say that there is no distraction.

14 COMMISSIONER McGAFFIGAN: You're going to make the same
15 offer to Chris when he shows up?

16 MR. KNAPIK: We'll be glad to talk to him.

17 COMMISSIONER McGAFFIGAN: I am worried about workforce
18 issues. We ourselves are at fault. If Constellation were on this panel they would
19 tell you we're stealing people from them left and right. I do think that at some point
20 very well qualified, long serving folks that they then have to replace. I see a lot of
21 that. I see a lot of this stealing from Peter by Paul. The focus has to be ultimately
22 on building the base of folks. It's very hard to do that.

1 How do you build a 15-year experienced engineer or 15-year experienced -
2 I guess it's mostly engineers. You just can't. Since we didn't anticipate this
3 nuclear renaissance coming, it's going to be hard. We are very worried. I'm
4 worried about three or four years from now we will have trained a very good group
5 of people here at NRC, GAO mentioned this in the study they did in January, and
6 we'll have a hell of a time retaining people.

7 MR. FERTEL: Five years because of your health benefits.

8 COMMISSIONER McGAFFIGAN: If you take health benefits to
9 retirement, after five years, right, that's our main draw for getting people at
10 Constellation, at Calvert. They get in here and they qualify for taking health
11 benefits with them and for a very, very small retirement benefit and you guys want
12 them back. Our kids are also - we can't keep our lawyers. Karen would tell you
13 that we're having a heck of a time keeping our young lawyers.

14 MS. CYR: We work them like crazy for the five years we've got them.

15 COMMISSIONER McGAFFIGAN: So the focus has to be on -- I think
16 lawyers there's enough coming out of law school and we'll get enough young
17 lawyers, perhaps, but the absorption rate of young lawyers and training them is
18 hard. Their productivity in the early years is lower. But it's a problem and we all
19 have to work together to try to find resolutions for these highly skilled positions that
20 are going to be required. And it can't be Peter robbing Paul.

21 MR. CHRISTIAN: I will mention one thing that we have done and
22 this gets to something the Chairman mentioned in a speech. We have started a

1 leadership academy that runs about two years. We've got two cohorts running
2 now. We're about a year plus into it. In fact, we're bringing them up to your
3 operations center the fourth quarter this year. That's to meet the leadership needs
4 of the future.

5 MR. CRANE: Our focus where we believe the crisis is going to come
6 in is with operators and operations training individuals. Right now as an industry
7 we're stealing back and forth. They'll be the start-up engineers. They'll be the
8 ones that have to get the new licenses going.

9 The engineers we don't have a problem with filling the positions. It's getting
10 the engineers trained as operators, licensed, experienced on shift and that takes
11 seven to eight years to really get a person at that level. Today is where the
12 robbing is going on and its going to be magnified in a couple years.

13 COMMISSIONER McGAFFIGAN: It sounds like - I did see an article
14 recently or a paper about that. Getting the operators trained requires having
15 simulated control rooms, which requires us being able to tell you what our
16 requirements are for the control rooms that are going to be all digital, those
17 themselves are going to raise challenges. And so boredom and whatever. So if
18 that really is a long lead item for somebody that is hoping to start up in 2015, you
19 all as a group have to be working on that. It isn't clear to me you're going to get
20 the full lead. You maybe can train operators in the existing units and then hope
21 initially and then when everything catches up, train them in the new units. Thank
22 you, Mr. Chairman.

1 COMMISSIONER JACZKO: Can I just add and I think that's a good
2 point that Commissioner McGaffigan raises on operator training and in particular
3 we have the new Part 26 rules coming in about a year-and-a-half time. That will
4 potentially for some facilities maybe require additional operators to comply with
5 those provisions.

6 It is a meeting we had several months ago, someone offered it to me as the
7 best hope for potential leading indicator of performance as the status of the
8 operator pipeline.

9 COMMISSIONER McGAFFIGAN: I think that might have been me.

10 COMMISSIONER JACZKO: Actually, it was Randy Eddington. Until
11 the facts dispel that, I'm clinging to that as a potential indicator. So certainly, as
12 very early indication it certainly is an area if that is one of the core work force
13 problems and having good operators in the pipeline and having good operator
14 programs can be a potential indicator for performance, it's one to really focus on,
15 certainly and get a handle on.

16 I don't have complete hope that will turn out to be a truly reliable indicator.
17 But nonetheless, I think it's important information.

18 MR. CRANE: We just maintain our levels right now. We hire over
19 100 operators a year at our fleet, so it's just the current forget what's going to be
20 the future state.

21 CHAIRMAN KLEIN: And then probably Admiral Donald doesn't like
22 you stealing from his work force either. Commissioner Lyons, do you have any

1 more questions?

2 COMMISSIONER LYONS: Thank you all for an excellent meeting.

3 CHAIRMAN KLEIN: Commissioner McGaffigan? Thank you for your
4 presentation. I'm sure that our staff took notes and we'll hear from them at 1:30
5 with their comments. Mayor Knapik, we appreciate you coming in and giving your
6 comments from the community.

7 MR. KNAPIK: Thank you for allowing me to come and give those. I
8 appreciate that greatly.

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