#### UNITED STATES OF AMERICA

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## NUCLEAR REGULATORY COMMISSION

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BRIEFING ON STATUS OF NEW REACTOR ISSUES, PART 2

AFTERNOON SESSION

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MONDAY

NOVEMBER 21, 2005

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The hearing came to order at 1:30 p.m. in the Commission Hearing Room of One White Flint North. Dr. Nils J. Diaz, Chairman, presiding.

PRESENT:

NILS J. DIAZCHAIRMANEDWARD MCGAFFIGAN, JR.COMMISSIONERJEFFREY S. MERRIFIELDCOMMISSIONERGREGORY B. JACZKOCOMMISSIONERPETER B. LYONSCOMMISSIONER

# PRESENTERS

# NRC STAFF PANEL

Luis A. Reyes, EDO

Jim Dyer, Director, NRR

David Matthews, NRR

James McDermott, HR

### PROCEEDINGS

(1:36:36 p.m.)

CHAIRMAN DIAZ: Good afternoon and welcome to round two of new reactor licensing. We had the opportunity this morning to listen and interact with industry representatives. Now the staff has the chance to put those things together and surely you have some learning from this morning. We are interested in listening to how things have changed. I think we have heard enough of the issues. I think we understand the different factors that have come into play in bringing this new renewed interest and also the fact that we're getting a lot more than what we were expecting. We seem to have a reasonable explanation that the staff realizes there is a tall order in front of you and we just want to make sure that you are up to the task.

Do my fellow Commissioners have any comments?

COMMISSIONER MERRIFIELD: Mr. Chairman, I would like to make one initial comment. We heard a lot from our licensees, and from the vendors this morning and the financial community about the new environment for the potential ordering of nuclear power plants in the United States and that is a far different environment than I think any one of us would have considered two, three, four, five years ago. And so it's a quite different circumstance. There are a lot of folks out there who will point to things like the cost of uranium, the cost of alternative energy supplies, any host of reasons why our nation now faces the current situation it does. One of the reasons I think that this industry is now able to consider the possibility of building new plants was not mentioned and I think that point is we're a different agency than we were seven, eight or nine years ago. The degree of regulatory predictability, the sense that we are a more efficient, effective agency, fully consistent with our protection of the public health and safety is a credit to the significant work undertaken by our staff. And I think to some degree also the leadership shown by the Commission. And I think in the opening second part of our meetings today I think it should be reflected that this new environment is in fact in part predicated on the work done by this agency to prepare itself for this very same round of new orders. So I would want to recognize the hard work done by our staff. There is obviously, as was described this morning, much for us ahead but I think that we can certainly assure ourselves to a certain extent that our staff is better prepared and better able than they were many years ago. I think that is a good point.

CHAIRMAN DIAZ: Thank you Commissioner Merrifield. A few weeks ago when I talked to industry, in fact, I made that very same point that I am very happy that you caught that it was not said this morning, but it is an excellent point. I think we are much better prepared. I think we are wiser. Maybe it because we all have many, many scares. But it is true that the agency is in a better position to do what we need to do if we are asked to do so. And with that Mr. Reyes.

MR. REYES: Chairman and Commissioners, the staff is here to brief the Commission on new reactor licensing activities. This is an update from our April 2005 briefing. Since that time in April several things have changed, but two salient points I want to make. The first one is the President just approved the Fiscal Year 06 budget for the

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agency. When we put that budget together we did some anticipation of the expected work but we did not have the foresight to anticipate all the work that is being proposed to be presented to us. And, of course, the second one is the Energy Policy Act that has been a catalyst to some of that activity. I'd like to turn over the meeting to Jim Dyer, who is going to talk about the overview, and the presentation. Jim.

MR. DYER: Thank you Luis. If I can have slides 2 and 3, these are the acronyms we're going to be using, try not to use, but we probably will use them in the slides. Go to slide 4, please. This slide is originally intended to set the framework for our discussions. This is our flow chart of the Part 52 process. I think I went through it in detail at the April Commission meeting, just suffice to say that we do believe that this process provides regulatory stability and certainty by allowing early resolution of the safety and environmental issues before plant construction. And it's a trade-off in that the industry and the vendors need to submit the information up front in order to allow our process to go forward in it's openness and proceed to the hearings and makes the decisions earlier in the process. And as was explained early this morning, and as we've seen and will discuss here, what we're seeing is the way that the process is being planned to be implemented by the industry is posing challenges in that it's not the way we envisioned it occurring.

Slide 5 is the agenda of the topics that we're proposing to discuss. First, Dave Matthews will address the new reactor licensing, the status of key issues, and our accomplishments and the infrastructure improvements. I'd note that that's where we'll discuss the construction and inspection program and the recent revisions to 10 CFR Part 52, which were of much interest earlier this morning in the presentations.

I'll then discuss what we see now as our upcoming challenges and our planned approach for dealing with some of those challenges. And then Jim McDermott will discuss the agency-wide human capital initiatives. So with that, let me turn the presentation over to Dave Matthews.

MR. MATTHEWS: Good afternoon, Mr. Chairman, Commissioners. I'd like to talk to you about our progress to date, reflect on accomplishments in a couple of areas, Early Site Permits and Design Certification arenas, and then I want to move to discuss several of the infrastructure improvements that we're in the process of making in the new reactor program. Specifically as an indicator of the information to come, I'm going to speak to the Part 52 update and its purpose. What I'll describe as the COL Regulatory Guidance on security issues. As Jim mentioned, the Construction Inspection program progress to-date and plans, and then our efforts to update certain of the regulatory guidance documents, such as the SRP.

Turning to page 7, focusing first on Early Site Permits, there's been a lot of progress to-date in the Early Site Permit area. Two out of the three FSERs have been completed, and we expect completion of the third SER, in this instance the Clinton site, after the first of the year in 2006. That schedule is a little bit longer, the one for Clinton, by virtue of the fact - and I'll mention this in terms of the Lessons Learned, there was a new method offered for resolving seismic issues that the staff had previously not reviewed or approved, and that was a challenge for the staff in the context of a new application, and it caused the schedule to be extended beyond that template which we had originally established for that review.

With regard to the environmental review activities, we have issued three draft Environmental Impact Statements for Early Site Permits. We also have scheduled three final Environmental Impact Statements for completion. One of those I cannot give you a certain date for completion by virtue of the fact, as was mentioned this morning, the environmental report and ESP application for Dominion's North Anna needs to be resubmitted by virtue of decisions made by the Applicant, and we aren't going to be able to estimate a schedule for completion of that activity until we understand the extent of those changes. And at this point in time, Dominion hasn't revealed just how extensive those changes are going to be. We expect them to be significant.

COMMISSIONER MCGAFFIGAN: Mr. Chairman, significant changes, doesn't that require under NEPA that we reissue a draft.

MR. MATTHEWS: We think that there will have to be at least some portion of the prior environmental review reissued for public comment, yes. That's a reasonable expectation given what we've heard is the nature of the changes. Whether it would be a "full EIS reissuance", I can't speak to and the staff really isn't in a position to estimate that yet.

COMMISSIONER MCGAFFIGAN: But there will be

another round of public comment?

MR. MATTHEWS: Oh, there absolutely will be when you issue - I don't know whether we call it - maybe a supplemental draft. Definitely would have to have another public comment period associated with it. And then we also have an expectation that there be an ESP submitted by Southern Company or Southern Nuclear Operating Company as you heard today, and we are engaged in preapplication activity with them, as well.

A few of the Lessons Learned I might mention with regard to the Early Site Permit process is that we found that the Early Site Permit process confronted us with what I'll probably repeat during some of my comments later this afternoon. We had a challenge between what I call finality versus flexibility. Flexibility was desired by the applicants in all three ESPs in that they have yet to identify specific designs that they intended to put on that site that they had identified for review. And as a result, we had to come up with what we would call a plant parameter envelope, which attempted to articulate the outline of the expected impacts ensuing from a range of designs.

As you might imagine, that results in the Early Site Permit being issued or potentially issued, certainly, the SER reflecting certain open items that can only be resolved at the time that a final design is selected. So you might call it a work around. We viewed it as a way to move forward with the ESP review in the absence of finality, and that it did provide flexibility. But it's a good indication of items that we've seen both in the ESP arena, and I'll mention in the design certification arena, where if decisions aren't made early in the process, they have to be

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reserved for later periods in the process. And this runs somewhat counter, although they can be accommodated in the Part 52 process, with the philosophy that was established when we issued Part 52 in the first instance.

I mentioned earlier the issue of a new method or a new methodology being introduced, that the Staff may not have had an opportunity to review in either the pre-application or topical report phase. That's always a challenge when it's introduced in the course of a review, especially if we don't anticipate it, and we've issued or suggested a schedule, which we then have to revise based upon a significant change in scope.

The other thing that I'm sure that you're aware of, there was a lot of interaction during the latter part of the Dominion review with the State of Virginia, and that would lend itself to contributing to a list of Lessons Learned, which is that there needs to be a great deal more interaction principally by the applicant. And certainly, we would intend to increase our level of interaction with the state and local agencies that may play a role that's vested within them by Federal statute, which many times, as you know, those federal environmental statutes are implemented at state levels. So consequently, they do provide a potential source of, I guess I'd call it consternation, with regard to certainty.

Going on to page 8, with regard to the design certification area, we've certified three major designs. I won't repeat them all. We are now aware that the industry is interested in us reviewing three asyet uncertified designs. At some point this morning we talked about all of them, I believe, or you did. The ESBWR from General Electric, the EPR from AREVA Framatome, and the AP1000 from Westinghouse. The AP1000 rulemaking is in progress, which means we've accepted that application. We've reviewed it. We've issued a final design approval. And at this point in time, we are in the final throws of rulemaking.

Again, this gives me an opportunity to mention that even in the AP1000 which has gone according to schedule, there are still what I referred to both in history and currently as regulatory gaps in some of these documents by virtue of the fact that they have attendant to them something called Design Acceptance Criteria, which addresses those issues of the design that the vendor at this point in time is unable or doesn't find themselves in a position to support finality.

They represent basically a deferral of work that cannot be addressed or is not addressed in the final design control document in support of the rule, and so we end up with something generally referred to as COL Action Items. Okay? They're representative of instances where there's a trend that runs at times counter to some of the expectations the staff had in establishing template schedules in time past based upon the Part 52 model. It emphasizes again the need for high quality complete applications.

COMMISSIONER McGAFFIGAN: Mr. Chairman, could I ask a clarifying question. If you are not working on a certified design issue, say aside from AP1000, you probably aren't going to be in the COLs, what is needed to get the COL across the finish line. Is it the final design approval equivalent or is it the rulemaking certifying the design?

MR. MATTHEWS: Obviously a rulemaking certifying the design would facilitate that process.

COMMISSIONER McGAFFIGAN: But if you're dealing with ESBWR, you get an application in 2007, you have a parallel process going on ESBWR, in order to issue a COL, which would the staff need, a final design approval in the parallel process, or a certification rulemaking in the parallel process? I'm just trying to understand timing.

MR. MATTHEWS: Yes. And I don't know that I can give you what would maybe be a legally sufficient answer. Our expectation is that you'd at least have to get to the stage where if you were in the design certification process, you'd be in a position to issue a final design approval.

COMMISSIONER McGAFFIGAN: My question was binary, do you need a final design approval or do you need a design cert, and you're saying you at least need final design approval. You don't know whether you need design cert.

MR. MATTHEWS: I don't believe that if they're in a COL process you need the design cert.

COMMISSIONER McGAFFIGAN: You don't need the design cert.

MR. MATTHEWS: Again, that is something –

MS. CYR: If you are doing a specific application in the context of a COL, there may be a parallel process may be in terms of how you process it. You may end up using parts of both processes, but

I think as a legal matter you would not have to have something that you labeled an FDA in order to issue a COL.

MR. MATTHEWS: And I think I described it that we would at least need the level of completion of the application and the staff's review that would have permitted us to issue an -

MS CYR: Right. You need FSAR level information.

MR. MATTHEWS: But I need that equivalent level of completion.

COMMISSIONER McGAFFIGAN: But the equivalent level of completion, you've written it all down and you've done the final design approval.

CHAIRMAN DIAZ: You don't have the process. You will have it in the COL. You will have to have completed the design to the level that the staff is satisfied that the safety case is complete or you might not have the rulemaking --

COMMISSIONER McGAFFIGAN: Yes. It sounds like you've written everything we need for a final design approval if you have an FSAR whether it's site specific or general. They said this morning that you are going to get a standardized --

CHAIRMAN DIAZ: They could have written it but you don't necessarily have to call it that. It would be part of the COL and not part of the --

COMMISSIONER McGAFFIGAN: I think for efficiency you'd want to call it that so that you could then say to all the other applicants we now have final design approval.

CHAIRMAN DIAZ: You can eventually convert it into it.

But that's what the issue --

COMMISSIONER MCGAFFIGAN: The lawyers are all smiling, they know something I don't, but I'll let it go.

MR. MATTHEWS: I'm not going to attempt to further shed light on this.

COMMISSIONER MCGAFFIGAN: If this is a legal matter, God bless the applicants.

MR. MATTHEWS: The ESBWR application, which was an application for design certification, was submitted in August. The staff was not at that point in time, based upon its detailed review, prepared to accept it for docketing, but we did see the value in continuing and beginning the review of certain elements of it. And we suggested that GE take the opportunity to amend that application, and then we would make the final decision on acceptability.

They've done that. They issued a supplementary input to us on the 24<sup>th</sup> of October, and we're right now in the middle of a detailed review process of that supplementary information with the intent of making a decision on acceptability in the near future, and establishing an appropriate review schedule.

I'd just mention that we have had pre-application review activity with respect to the EPR. We're also developing a plan to work with international stakeholders as part of MDAP or Multi-national Design Approval Program, which I'll talk about more in the next slide. And then in addition, there are other design interactions, designs for which there is staff interaction going on with potential applicants, particularly the PBMR and IRIS. Turning now for a moment to the Multi-national Design Approval Program, the Commission has approved Stage I, and for the benefit of those who may be in the audience not familiar with Stage I, that's generally described as sharing and exchanging of information among participating regulatory authorities. Those discussions continue with potential participating regulating authorities. OIP, the Office of International Programs, is coordinating our participation in that regard. NRR does have a role in that. We will remain responsible for regulatory decisions.

CHAIRMAN DIAZ: Fine. So it's a very formal exchange, it goes beyond the informal. It's a very formalized, very almost contractual type exchange, so the staff can actually rely on that information first and then confirm it before they make their decision.

MR. MATTHEWS: Good. And that's an appropriate clarification for my articulation of NRR's responsibilities in this regard. We'll manage the review topics that are the subject of that formal coordination, and we'll integrate the technical contributions from those participating regulatory authorities into the NRC's safety evaluation process. And as I mentioned earlier, we expect the EPR design certification process and application to be the first example of the implementation of this at Stage I.

Turning now on slide 10 to the Part 52 updating, I'd like to describe briefly the purposes that the staff saw in the updating of this rule. As you may recall, and it was mentioned earlier today, that there was a proposed rule in 2003. The update that is in front of the Commission for review at this point in time proposes a rule to go out for

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public comment that would be responsive to the prior industry comments on the earlier 2003 rule. We believe there was a need for further clarity between Part 52 and its relationship to the related provisions, technical requirements in Part 50. And we believe by virtue of introducing that clarity, that it's going to improve efficiency and effectiveness of the preparation of the application and their subsequent review, and in so doing, it's our view that it's going to promote regulatory certainty.

Again, to summarize, it's principally changes based upon the comments on the 2003 proposed rule. We did include Lessons Learned during our review of design certifications and Early Site Permits, recent experience in many instances, and then we've had many discussions and public interactions with stakeholders about those processes. And we tried to incorporate suggestions and improvements that came as a result of those interactions.

With regard to regulatory guidance supporting the upcoming COL reviews the staff, as again mentioned this morning, has worked closely with NEI in the review of 04-01, an NEI draft entitled Combined License Application Guidance. This is guidance to potential applicants who are developing a COL. It doesn't take the place of, but would compliment our efforts to develop a Reg Guide which we traditionally call the Standard Format and Content Reg Guide. The previous one for Part 50 was Reg Guide 1.70, and our expectation would be to publish an analog to that. And to the extent that we can endorse it and adopt some of the positions expressed in 04-01 that are appropriate for us to issue as regulatory guidance as the regulatory authority, we intend to do that.

COMMISSIONER MERRIFIELD: A clarifying question. MR. MATTHEWS: Yes.

COMMISSIONER MERRIFIELD: Do you have an expected time line?

MR. MATTHEWS: I don't at this point in time. It's high priority work, but we expect to get out final comments back to NEI on 04-01 in the near future, and then we will begin to establish some expected schedules for several Reg Guides that we need to work on, including ones we need to rely on Research input for.

CHAIRMAN DIAZ: From the questions and the looks of my fellow Commissioners, it appears that that is a high priority.

COMMISSIONER MCGAFFIGAN: For which a schedule would be appropriate.

COMMISSIONER MERRIFIELD: There should be some planning time line.

MR. MATTHEWS: Yes there will. We'll be sharing that with the Commission as soon as that schedule has been established. We have before you a SECY Paper 05-0197, which responded to your previous SRMs with regard to the review of operational programs, and we have proposed and suggested for Commission approval an alternate regulatory approach to address operational program reviews in the context of a COL. We think this alternate regulatory approach is reflective of a successful interaction with our stakeholders. It would permit the submission of information as part of the COL, and if the information that's provided is sufficient for us to make a reasonable assurance finding, we would do so at that time, along with the provision of several license conditions to address implementation; and thereby, provide an alternative to the establishment of ITAAC for those operational programs.

We also, and again this was mentioned earlier, offered to the Commission SECY-05-0120, Security Design Expectations for New Reactor Licensing Activities. You have made a decision in that regard, and have issued an SRM, and the staff is proceeding to develop the changes to the policy statement as reflected and requested by us, and as agreed to by you. We are going to develop guidance for security assessments and target set analysis for the new and next generation reactor designs, and conduct a rulemaking to require applicants to submit a security assessment and target set analysis with their applications. And in the meantime, we have been working with the vendors who are expected to bring design certifications in in the near future, to share with them the guidance in the previous requirements of the orders such that they can take benefit of that, and we're encouraging them to submit security assessments along with their design certifications.

COMMISSIONER McGAFFIGAN: Mr. Chairman, could I just clarify again, Commission Merrifield's question, is there a time line for doing this? It's not in the Part 52, and you say explicitly in the new Part 52 proposal that we're not dealing with this guidance.

MR. MATTHEWS: We have time lines established for the security-related changes to the policy statement and the associated rulemaking activities. I just don't have them available at my fingertips to

share what they are.

COMMISSIONER McGAFFIGAN: And, they are in this November 16<sup>th</sup> memorandum from Luis to the Commission that outline -

MR. MATTHEWS: Our expected schedule.

COMMISSIONER McGAFFIGAN: I was having a hard time finding them. I would think that would be a very high priority because it's relevant to the COL applications. I can't find that rulemaking in here.

CHAIRMAN DIAZ: I think that it is high priority, it should be there.

MR. MATTHEWS: I think it was articulated in the SRM requirement.

COMMISSIONER McGAFFIGAN: Is this going to be combined with the -- 73.55, 56, 57 and appendices is clearly the highest priority in my mind, and is the intent to throw this into that rulemaking?

CHAIRMAN DIAZ: Yes, that was the intent of the SRM.

COMMISSIONER McGAFFIGAN: There's why there is not a separate rulemaking listed. The intent of the SRM is that this rulemaking we get next May 28<sup>th</sup> will include the guidance you've got on--

MR. REYES: It will be included in the rulemaking plan.

### COMMISSIONER McGAFFIGAN: There is no

rulemaking plan. The Commission waived the need for rulemaking plan.

MR. REYES: The rulemaking schedule that we provided the Commission, we have a chart of all the rules, and when you move one around, then it impacts the others. So my point being is there's only one schedule for rulemaking and will include that.

MR. MATTHEWS: The phraseology we use is the rulemaking activities plan, the RAP.

COMMISSIONER MCGAFFIGAN: You're saying that we have a very nice document in front of us addressed from Luis to the Commission about schedules and resources for security rulemakings, and I couldn't find this rulemaking in that schedule, unless it's subsumed under 73.55.

MR. REYES: Within the context of the rule.

CHAIRMAN DIAZ: That was the intention of the SRM.

The SRM was modified by the Commission to reflect it in that manner.

MR. REYES: Which means we had to change our schedule.

COMMISSIONER MCGAFFIGAN: No. The schedule the Chairman – we've given you from February 28<sup>th</sup> to May 28<sup>th</sup>.

MR. REYES: But it may not affect this one. You know, we only have so many people, and whenever you add more to one rule, the other rule --

CHAIRMAN DIAZ: This one is the one that we said is going to be within that period of time, so --

COMMISSIONER McGAFFIGAN: But it could affect the schedule for other rules.

MR. REYES: We only have so many people and 24 hours a day.

was there, and when we actually did it, it was there.

MR. MATTHEWS: Slide 12 please. Turning now to the construction inspection program. The construction inspection program consists of many modules, but they can be identified in four categories of inspections, which I have described on this slide. Those supporting ESP activities, those supporting pre-COL inspections. That would be ones associated, for example, with quality assurance, ITAAC inspections that would take place during the duration of the construction activity subsequent to the issuance of a COL. And then those non-ITAAC inspections, which would be in support of, for example, the operational program review activities, which I mentioned earlier.

COMMISSIONER MERRIFIELD: One clarification. If we had inspections of vendors we had to undertake, let's say we wanted to have someone go out and look at a vessel someplace, where would that --

MR. MATTHEWS: That would be part of the pre-COL inspections. And I'd just mention that we have a paper planned for early 2006 that fully describes this construction inspection program, and its planned implementation.

In the area on slide 13, enhancing our capabilities for review, we are going to streamline our standard review plan update process, which the Commission commended to us sometime earlier. We're going to streamline it in support of this more recent level of activities in COLs. We're re-prioritizing the SRP updates to identify those that would be specifically supportive of ESP and COL reviews that we expect to undertake starting at the end of 2007.

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At this point in time, our sorting of those standard review plan sections would indicate about 15 percent of them would qualify as "high priority", and about 5 percent which may not need to be updated to support this upcoming level of activity. We plan to take advantage of the experience gained from the ongoing Part 52 review processes, ESP and design certification activities in our pre-application interface on COLs to benefit from that experience as we update the standard review plan.

As mentioned earlier, we are, for example, considering, and now we will consider with even a higher priority the development of a standard format and content Reg Guide in the near term. And then we're going to look at Research's existing Regulatory Guide prioritization scheme to ensure that our licensing needs will be met, and if changes are needed to that, we're going to introduce those changes.

We're examining other areas for streamlining, strategies that can improve effectiveness and efficiency of the industry and the regulator to safely complete these reviews; such as, the ideas you heard this morning about technical review standardization, and Jim Dyer will speak to these in more detail in the subsequent slides.

MR. DYER: Thank you. Can I have slide 14, please. I think as we look ahead at what are some of our challenges, certainly we've had a significant increase in the number of potential applications. I'll go through that on my next slide. And also, we've also had the scope of the reviews of these applications have also been increased to the number of issues to be resolved during these reviews.

In April 2005, when we were here at the Commission

meeting, I was reeling from the fact that we might be dealing with four combined license applications and two design certifications in Fiscal Year 2008, and that was the basis by which we recommended the supplemental funding and additional effort to prepare for this level of effort that we reported out on right here.

As we can see, those challenges today are far greater. And also, as Dave said, because of the challenges we've seen with the design certification COL action items that are open, the plant parameter envelopes from some of the early site permits and the challenges of reconciling some of those issues, we view now that the scope of the reviews in the future in 2007 and beyond will be even more challenging than we originally envisioned when we gave you some of those earlier schedules.

Slide 15 - this slide is an update to the simplified schedule that I provided in April 2005, and one correction - where we originally thought we were going to finish the three early site permits in Fiscal Year 2006, in fact, the staff anticipates we'll be done with our review, but the hearings could be going on, and probably most likely in 2007 is when they'll be presented to the Commission for final decision. But there's really three issues that I'd like to just point out from this chart.

One is the increase of the shear numbers. We now are looking at ten combined licenses in Fiscal Year 2007, applications in Fiscal Year 2007 and 2008 up from the original number of four six months ago. The second is both the design certification reviews to the ESBWR and the EPR will not be complete to support those 2007 and 2008 applications where they will be used as part of the combined

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license application for several of the plants.

And third, the Early Site Permit reviews may not be complete prior to the combined license applications. Most certainly for Southern Company, but as Dave spoke to earlier, we recently had some challenges with the Dominion Early Site Permit review, and until we resolve those issues, we aren't certain what the schedule is going to be for the North Anna Early Site Permit.

Overall, as we look forward in 2007 and beyond, we're looking at a very uncertain demand on the part of the industry as to what our challenges are going to be as far as workload and the nature of the problems that we're going to be faced with.

Slide 16, please. This slide is talking about what we've done so far to plan --

COMMISSIONER McGAFFIGAN: Mr. Chairman, on the question of the ten that we're now expecting, the ten applications, how many units are involved? Do you know?

MR. DYER: There's also some in 2009 and beyond, and the total number of units that we have coming up could be upwards of 15.

COMMISSIONER McGAFFIGAN: Because Progress said they were going to have two units for each of two sites, and I'm just wondering how many of the others, Constellation seems, which is not on the list yet - seems to be looking at multi-units.

MR. DYER: We have UniStar listed on there.

COMMISSIONER McGAFFIGAN: UniStar is there.

MR. DYER: But that's one of Constellations.

Constellation has also said they're going to come in with the second two-unit site later, so there will be four for them. The total number --

COMMISSIONER MERRIFIELD: There's one clarification that I think the licensees will tell you. Some of them will be seeking to license multiple units at a site, but that wouldn't necessarily mean that they would construct both units at the same time.

COMMISSIONER MCGAFFIGAN: There's some efficiency probably in doing both at the same time.

COMMISSIONER MERRIFIELD: Well, there's an efficiency in having multiple units licensed, but they might build serially, so while we might have applications for 15 units, that doesn't necessarily that it engender orders for 15 units immediately thereafter.

COMMISSIONER MCGAFFIGAN: Fifteen units at about 1.5 gigawatts apiece, so about 22.5 gigawatts. Is that base load power?

MR. DYER: The AP 1000 is about 1,100 megawatts, and the ESBWR is about 1,500 megawatts, and the EPR is up over 1,600 megawatts.

COMMISSIONER MCGAFFIGAN: All right. So my numbers are about right.

MR. REYES: Rough numbers, yes.

MR. MATTHEWS: Consistent with our approach on license renewal applications, we face the same challenge of how to count, or at least how to estimate from a resource standpoint. And we're expecting now to treat individual applications, and those applications may be for more than one unit at a given site, possibly separated in time in terms of their intent to construct, but we would expect a staff review where possible would be done in parallel, if not one on top of the other. So, therefore, there would be a benefit to describing the resource implication by application, as opposed to by unit.

COMMISSIONER MERRIFIELD: And the other one I think is important to note for the record is that some of the vendors, and some of the utilities are saying they might have multiple sites that have the same units. Obviously, it would be two different facilities but it would be same units at both sites, so it would bring with it a difference set of efficiencies as well.

MR. MATTHEWS: Yes. And we would treat those as separate "applications" because in that instance, even though they have the same design, we'd be dealing with separate environmental impact reviews, hearings, et cetera.

COMMISSIONER MCGAFFIGAN: There is really a need for 22.5 gigawatts of base load by 2015 mostly in the southeast?

MR. MATTHEWS: Yes.

COMMISSIONER MERRIFIELD: Okay. It's an awful lot of base load.

MR. DYER: And, Commissioner, the license applications are the challenge is in our licensing review. And we estimate that a two-unit site would take about 120 percent of the licensing resources as a single unit site, so there is some efficiencies in coming in for the two, but when it comes to construction, in our construction inspection program, that's where the real challenge is - it's by unit, and so that's where we're really going to be challenged in the out years in the scheduling of how much construction is going on, how much of the vendor work, and that.

Slide 16, please. What we've done so far in order as an agency, and this is beyond some of the accomplishments that Dave spoke of earlier just with the new reactor program. One, we're streamlining the organization. NRR and Nuclear Security and Incident Response Offices – the reorganization plans have been approved by the Commission, and I believe Research's plan is before the Commission, or certainly on its way. NRR reorganized the last week in October, eliminating a layer of senior management in favor of additional first-line supervisors. This is one of the things we thought we needed to do in order to deal appropriately with the expansion that we were expecting in the near term.

Additionally, we also elevated the new reactor licensing to a division, and Dave Matthews is the Division Director for that division. And then we also consolidated our risk activities into a single division within the organization to focus really on risk-informed regulation.

I would give the Commission some credit on this. We picked the direction, I think, to eliminate the layer, but when I got the SRM that said good idea, do it by the end of October, I was planning more in the April-July time frame, and now that I'm seeing the presentation that came on, thank you. I'm glad we're through this and moving forward, because it was the right thing to do.

We're also improving our infrastructure, and that goes

beyond, again, the new reactor infrastructure. This goes to our training, our rulemaking, our licensing, and our oversight programs office-wide. One of the efforts that we recognize is that the magnitude of the new reactor licensing effort is going to change the way we do business agency-wide really, but certainly around the entire office. We cannot afford the over-expenditures of resources and delays in products with the significance determination process. Some of our challenges with power uprate program and that, so we've taken a renewed interest in focusing on executing our operational reactor programs in a much more efficient and effective manner going forward, and we need to do that by improving our infrastructure and our training in those areas.

We're also looking to take a more disciplined approach to executing our regulatory responsibility. With the development of the infrastructure we set clear expectations. We intend to enforce those expectations both on the industry and ourselves. We need to meet our schedules and make our deliverables, and make decisions with the information we have available.

We are also working to expand our contractor base. This is an issue I spoke to you about in April of this year. We have commercial contractor support with some of our environmental reviews in the licensing renewal area, and we're talking to the DOE labs about options for supporting both our technical and our environmental capability in the out years.

At this point, we also have a very aggressive hiring program in NRR, as well as throughout the agency. And at that point, let me turn the presentation over to Jim McDermott, who will talk about human capital development.

MR. McDERMOTT: Thank you, Jim. I'm going to tell you how we're going to hire 350 people this year.

COMMISSIONER MCGAFFIGAN: And next year, and the year after.

MR. McDERMOTT: The challenge here has got two components, as you'll easily recognize. Replacement hiring, and then hiring for the new work, the add-ons. Replacement hiring is going to run about 200 people a year, if we're lucky. That assumes a 6-1/4 percent attrition rate in the agency. So I've got 200 to hire in 06 on a replacement basis, and 150 new FTE to use. That's a little different. That means I'm going to use that really, I need 200 people on board January 1<sup>st</sup>, and that's not going to happen. NRR has got half of that to fill, and security a good chunk and all the rest. We're marching out smartly to do this. We've done some things. We focused our hiring a little bit more accurately by using our strategic workforce planning tool that says who is leaving when? This is very useful for replacement hiring, that says okay, these are the scales – my famous thing about structural engineers. They're at high risk. They're going to be gone. We've got to focus there, I won't belabor that.

The other thing --

COMMISSIONER McGAFFIGAN: Mr. Chairman, could I clarify? The 6-1/4 percent rate that we're losing people, that's based on retirements, or is that based also on a guess as to how many people who are FERS, and therefore, fungible, who industry is going to hire away from us? MR. McDERMOTT: It's a global number. It's that many losses period, whether it's retirement --

COMMISSIONER McGAFFIGAN: Is there anything in there that says industry may try to hire our people?

MR. REYES: Yes, because we have not experienced 6-1/4 percent. We are closer to 5 percent. What we doing is we are adjusting the budget assumptions, for FY-06, 07, and on for the factor you're talking about. That's how we come about over 6 percent attrition. We have not experienced that, but we're adding for that.

MR. McDERMOTT: The 5 percent is for very large values of 5, it was 5.97 percent last year.

COMMISSIONER MCGAFFIGAN: So are we closer to seven? Luis, you're thinking 30 people a year we will loose to industry.

MR. REYES: We don't know yet. We don't know yet, but our assumptions are 6-1/4, and then goes up every year as we go into the future. Now we may have to adjust that higher.

COMMISSIONER McGAFFIGAN: I hope not. I mean, is that –

COMMISSIONER MERRIFIELD: If the industry wanted to efficient and effective, hopefully they will minimize the poaching they do.

CHAIRMAN DIAZ: But, of course, we can take away from industry.

MR. McDERMOTT: At the ANS meeting I understand that Westinghouse said they're going to hire 500 people this year, GE 100, some of the other outfits 200 over two years, so the competition is shaping up out there, no doubt about that, and we're aware of that. I haven't seen anything happening day-to-day yet in this fiscal year that says folks are leaving. On the other hand this is not the time of year that folks leave. It's a murky picture at best.

#### COMMISSIONER MCGAFFIGAN: Okay.

MR. McDERMOTT: We are doing things internally to make our hiring process more efficient, more effective. NRR has done a great job about getting focused attention to cut down the cycle time between when we have a live body before the office for selection and the selection decision. That's working rather well. Right now they brought on nine people recently, and they've got 27 acceptances out there, and 51 offers out there that we're waiting to hear, so there's push there. A key factor in that has been senior management level involvement in the recruitment effort. That's key. I just works.

We're going to use recruitment incentives, and we've budgeted for those, and we may be back looking for more. I think it's going to take money to recruit people for the Washington, D.C. area. We're going to have to cough-up some good relocation bonus allowances for these folks because the housing is so outrageous here.

On the next slide we have some future hiring strategies we're talking about. We're getting a package ready to go to OPM for direct hire authority for some of our categories which means, if we find them, we can give them a job offer on the spot. We do not have to conduct separate merit promotion process. We're leveraging the authorities that we've got in the Energy Bill, and will be leveraging in the training side too, but we're just beginning that. We are going to get a big chunk of grant money that we can administer. I've already got feelers out for a grants administrator. This is new work for us, but our view is it might be in our interest to do this for ourselves rather than to get a lab or somebody to do it for us.

Another thing we're doing, and it may sound like not a biggie, but our second best source of successful applicants for positions in the agency is word-of-mouth, so we're going to incentives that. We're coming up with a program for referral awards to give people a cash award.

COMMISSIONER McGAFFIGAN: Do Commissioners get that award?

MR. McDERMOTT: Unfortunately --

MR. REYES: They's excluded, they're excluded.

COMMISSIONER McGAFFIGAN: I didn't think we could.

MR. McDERMOTT: In addition to the referral incentives they're going to talk out, we're going to use whatever counter-measures to attrition we can. Again, that may be somewhat robust, retention allowances for critical people and things like that. And one of the best things we've used so far is the waiver of the pension offset when you return a retiree, with some notable exceptions, to the agency.

COMMISSIONER McGAFFIGAN: I was on a subway recently, and I probably recruited three people for the agency. But wearing my badge, this young man probably 25 years old who is a graduate student in one of the engineering disciplines, and he was going to go home and tell his colleagues that NRC is a great place to work, so there you go. MR. McDERMOTT: If only we could give you the award. COMMISSIONER McGAFFIGAN: I know. I know. I didn't get his name.

MR. McDERMOTT: In all seriousness, you'd be surprised how effective that serendipitous recruiting is for the agency. We just run into people, we scarf them up and we get them.

Two other points on recruiting. One, I'm real interested in the construction inspection program where we might locate it, because depending on the area of the country, it might simplify or at least improve the recruitment possibilities. The other thing is we're going to have a space problem, and Luis has talked to you about that many times. If I had 200 people on the doorstep January 1<sup>st</sup>, we would not have seats for them. We're looking at how can we leverage telecommuting work. Former employees have called me saying hey, we see that we're back in business with the nuclear renaissance. I'd like to come back to work but my family now lives here. It's located here. I don't know. This person happened to be a materials inspector, and I said let's talk because we have materials inspectors who are essentially teleworking almost full time from home. And if that's working, then that's a recruitment advantage, and it's a space advantage in a negative sense we won't need space for them.

COMMISSIONER McGAFFIGAN: The request direct hire authority from OPM, is that likely to take more than 15 nanoseconds to get from OPM?

MR. McDERMOTT: Yes.

COMMISSIONER McGAFFIGAN: Why didn't we ask --

Senator Voinovich was willing to give us almost anything we wanted. Why didn't we ask for this?

MR. McDERMOTT: It was a view that that would look like too much of an end run of the Veteran's Preference Act, so we didn't. And that view is not entirely out of place. You've got to be very careful. People who have used some of these kinds of authorities have ended up in court. Some of the government-wide OPM programs have resulted in rather difficult litigation in the Appeals Court and places like that where they are saying wait a minute, and the Veteran's lobby is --

COMMISSIONER McGAFFIGAN: But, that still could have been made transparent to the Commission when we were putting together the legislative package. What you've just described as to why we didn't ask for that authority directly from Congress may be a perfectly good reason but it's the first time I'm hearing it.

MR. McDERMOTT: I've second-guessed myself on that, to be honest. And that doesn't mean that the door has slammed, it means I have to go and do it the hard way, so to speak, and get it from OPM, which I think we'll be successful with.

Turning to our learning strategies on slide 19, the environment. My mantra it's time to teach and time to learn. With all our talk about all our formal education programs and development programs, the most important aspect is on-the-job training. The reorganizations in the major program offices have resulted in more reasonable spans of control at the first level. The mantra is, again, people join an organization but they leave first level supervisors, so if we have the proper attention for the new folks we're hiring, we think that we will be better served in the long run. We also want to see time for mentoring factored into the workload estimates. That's the only way we're going to get there.

We are hiring a mix of inexperienced relatively recent graduates and experienced people. Our past experience has shown us that we can absorb maybe 50, maybe 60 fresh graduates, and that's about it. That really stresses our absorption capability if we go much beyond that. I think our experience in NRR would bear that out. There's only so many you can properly adjust to the culture, so it's a balancing act all along.

Knowledge Management is a key part of our learning strategies, and at the recent Senior Management meeting we charted a preliminary course, and we're pulling it together. It will be up to the Commission by the end of December with a paper on knowledge management, where we think we're going to take this. It'll focus and be made up of the usual things, how are going to gather, how are we going to store it, and above all, how are we going to disseminate this information, and this information is anything from standard review plans to simple how-to processes that are very useful for new employees.

We've done some training enhancements. We knew we were going to have retirements in Chattanooga, and we hired and we got I think four new instructors hired and qualified, and at least one, I think they're all in two technologies now and we had the expected retirement. We had three people that retired in Chattanooga, so we'll be back in the recruitment vein. I've got some selection certificates out there again to staff up, stay ahead of the curve for instructors for those

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kinds of courses.

We're providing more of those courses here in headquarters now than we had in the past. It's cheaper to fly an instructor up here than a class down to Chattanooga. We doubled our management and leadership development programs, as we told you, we'll graduate a class of senior executive service candidates in a couple of weeks, and the new class starts in January. We are just finishing up our leadership potential program, and we started a new one, so that will keep us in good shape, I believe, on the management and supervision front. We control our own destiny there. Those resources are usually drawn from within the agency and we can manage that. We're trying to be more efficient in the kind of course we teach. We don't want seasoned professionals, senior reactor operators taking exactly the same course we're giving to recent college graduates down at TTC. We've got to split that up and do what we need to do, and better tailor these things.

We're also running some extra formal qualifications programs. I think to begin with, project managers. We've always had a very good formal qualification process for inspectors. Now we want to take that to licensing project managers, and where it goes beyond that, I don't know. I'd have to ask Jim where else we would go. And relearning more efficient delivery systems, learn at your desk. We'll push those. They're not, by the way, a panacea. Some of this stuff is best taught face-to-face where you get interaction to questions, so that's not going to solve our entire problem.

Finally, the Energy Policy Act has a lot of good stuff for us

in the form of grants and fellowship provisions. Ren Kelley has some too in the HBCU area, and Hispanic serving institutions, and we're looking now at Native American institutions, and where we can go there. My thought is we're going to try and pull this together so we have an integrated approach to how we use these tools that the Policy Act has given us.

MR. DYER: Commissioner, Chairman, in conclusion, I think (Slide 20) one thing is what we've heard and what we've seen is that there's going to be a significant increase in the amount of work since we last discussed this topic with you in April. The number of COL applications may, in fact, triple from where we were last April in the years 2007, 2008, and 2009, and possibly 2010 where we'd be dealing with them all at the same time. And in anticipation of that, the staff has taken some actions as we originally said we were going to do six months ago, and I think we've delivered on those plans as we have worked very hard in the last six months. However, our resources are limited, and given the magnitude and the scope of the workforce in front of us, left to are traditional way and strategies for doing business in the licensing area for new reactors, we won't be successful. We've approached the industry, Chairman, and Commissioner Merrifield and some of the other Commissioners at the INPO conference. I addressed them at the ANS conference. Luis addressed some of them at the NSIAC meeting with NEI, in looking at an effort that we need to really focus on standardization and cooperation among the industry participants in their applications to the staff to get through the licensing challenges of particularly 2008. And I was very pleased by their

presentation this morning where we heard that that is an effort that they are undertaking and the direction they are taking, and that's good for us as we proceed in the out years.

COMMISSIONER McGAFFIGAN: NSIAC stands for what? I think I know, but it's not in your list of acronyms.

MR. REYES: There's a foram where all the CEO's and CNO's –

COMMISSIONER McGAFFIGAN: The N stands for Nuclear.

MR. REYES: Yes. Strategic

CHAIRMAN DIAZ: Strategic Advisory Group.

COMMISSIONER McGAFFIGAN: What does the I stand for? The Strategic Industry Advisory Group?

MR. REYES: Strategic Issues – it's just a form of Chief Nuclear Officers. With that, the staff concludes its presentation. I just want to re-emphasize, in January we're already scheduled, but we're going to give the Commission a Commission paper that's going to update the staff activities on new reactor licensing, specifically is going to include our recommendations on the construction inspection structure and approach. The reason being is early next year we have to formulate the FY 08 budget, and we have to anticipate that structure and how we're going to approach it so we can anticipate resources, et cetera, et cetera. So that is a key thing that we're going to ask feedback from the Commission on, and that we're anticipating - we talked a lot this morning about licensing activities. We're anticipating the next phase which will be construction. With that, this conclude the staff presentation.

COMMISSIONER McGAFFIGAN: I was told by the staff, is this the paper that's also going to tell us the staff's recommendations as to how to queue the 10 or 12, or whatever number of applications it is, based on criteria other than who walks in the door first and throws down an application?

MR. REYES: Well, we're going to propose to the Commission resource allocation, NRC's resource allocation based on performance, meaning I'm going to tell you what I suggest is how the NRC resources should be allocated based on the performance of the applicant. And we'll give you some attributes on that.

COMMISSIONER McGAFFIGAN: You know the performance of the applicant before you have the application.

MR. REYES: We will give you what those attributes are going to be.

CHAIRMAN DIAZ: It's going to be an interesting month of January. Let me just put it at that --

COMMISSIONER MERRIFIELD: I guess I should cancel my vacation.

MR. REYES: No.

CHAIRMAN DIAZ: If I cancel my vacation, my normally peaceful demeanor will be gone. I appreciate the staff trying to put this in perspective, especially after this morning. I think we are all coming to the realization that we all have work, the staff and the Commission and reduce it to practice so that both the licensees and the agency can work in that area in a manner that is kind of the day-to-day things that we do now that its routine but it's now been reduced to one issue that we can work with. There's a new theme, a new word, a new thing coming in, and that's new reactors, and it's probably going to be as consuming to us as the security issue was during the last few years. And I think we have to make that switch. I think it is important that we focus on that, and with that preamble, Commissioner Jaczko. I just couldn't help but notice that I've been busy with security for four years, and now I'm able to do something else.

COMMISSIONER JACZKO: I thought that I would actually ask a couple of questions. One of the things, and I've talked to many of you about this issue, if we look at all the schedules and the plans, very few of them I think follow the model of I think what the Commission had envisioned, and although by and large I think it fit under Part 52, there are some clear exceptions. For instance, I think the plans by Southern to come in with a Early Site Permit and then a COL in the middle of the Early Site Permit process is unclear under our regulatory standards how that would exactly function, since our regulations are specifically to an Early Site Permit which is defined to be in our regulation, issued Early Site Permit and not an Early Site Permit application. So on top of all the various I think permutations of the things that are allowed, we're getting permutations of things that are not necessarily specified in our regulations, which means would be coming in for exemptions. So on top of all the permutations we may see exemptions, in fact would provide us with additional permutations of how these things can work out. So I guess my question here a little bit is how - and perhaps this will get to the paper a little bit, and what we

talked about a little bit about prioritization -- in terms of the schedules that we've talked about, and that was for instance in SECY-01-0188, the 2001 SECY Paper, what do you see for the time lines to complete these kind of permutations I guess I could say on some of these COL applications? Are we going to be consistent with the 27 month - clearly not, since we don't have anybody really that's in the position to have a completed Early Site Permit and a design certification. So what kind of time lines do you think we're looking at to do a COL?

MR. DYER: As I believe was discussed earlier this morning, and I don't remember which Commissioner had the question concerning it, but you're in a parallel process review.

COMMISSIONER JACZKO: Funny how those things work.

MR. DYER: Yes. And, obviously, if it's in a design certification where we were normally looking in the four to five year time frame for a design certification review and rulemaking, and the other process is an Early Site Permit and review in parallel with that, it will be -- the long lead time will be the design certification review.

Now if you start off with a nominal five years and you've got a final design approval, I think it was Commissioner McGaffigan was talking about earlier, how much does that cut off the time -- is that applicable to your overall process? And that's what we have to deal with on a specific case-by-case basis, really, as they're coming in.

COMMISSIONER JACZKO: Well, one other thing, and I appreciate that answer. Certainly one of the things that we're hearing, the industry wants regulatory stability. And I think one of the things that frustrates me a little bit is that unfortunately, on the one hand they'd like regulatory stability when it comes to Part 52, but when it comes to schedules, they would like regulatory flexibility. And I think there's an important message here that I think it's certainly important for the Commission to lay out in a clear process, and that process needs to be driven by the needs of our review, and not necessarily by the needs of completing some of these applications in what I think are highly compressed time lines. So I don't want, and I see us going in a situation where we're doing case-by-case reviews, because part of what we're trying to do, and part of the intent of Part 52 is standardization, is to provide a flexible, well not flexible but a predictable process for how these reviews will take place. And I think, unfortunately, we're looking at a lot of unpredictability. Some of that, I think, can be improved by fixing a schedule, going back and looking, and saying well, these are the things that need to take place.

I'll ask this question a little bit differently, too, because I think one of the things that a lot of focus has been on, certainly where the staff reviews and all of these things, but a lot of this process is also driven by the adjudicatory process and the work that goes on in the licensing part. So I'm wondering to what extent you communicate with the licensing boards about what their schedule capabilities are. Could they handle -- how many hearings could they handle at one time, how many parallel processes could they handle for COL? Would they do them that way, or would they simply put part of it in abeyance until part of the proceeding is resolved. Have those kind of things been discussed?

MR. REYES: We're sharing the best information we have with the rest of the NRC, that includes ACRS for some products, and ASLB for other products, but it's a continuing change. I mean, it seems like every week we get more detail, so we're providing that information, and they're going to have to react like we're reacting in terms of anticipating resources, getting ready for multiple reviews. In the case of the technical staff, we're talking about putting teams together. You heard this morning the industry is considering grouping how some of the submittals are going to be, and we're trying to do team arrangements to try to maximize and leverage our resources. But we're providing -- the short answer is, we're sharing information with all the groups that will be involved in getting to the final stage.

COMMISSIONER JACZKO: I want to focus a little bit on a slightly different topic. Jim, you have lots of responsibilities beyond, as much as the Chairman, very focused on new reactors. You still have responsibilities and the whole agency does, of course, for the existing reactors. Maybe you could talk a little bit about the kinds of things you're doing to make sure that that focus stays appropriately on the existing operating fleet, even as all this new work kind of happens in the new reactor arena.

MR. DYER: Yes, sir. I think, and I skipped over it pretty much. One of the key things that we did when we took a look at how we wanted to reorganize was to how the breakdown would go. And if you look at our new organization, there's three associate directors that report to Bill Borchardt and I, and their role is really to be an extension of us, that we consider the five of us as the executive team that runs the

Office of Nuclear Reactor Regulation. And so you have one group led by Brian Sheron that is really the center of technical excellence in the traditional engineering realm. You have a second associate directorate that's headed by Bruce Boger that is really focused on operating reactor safety, the licensing, the license renewal program, the reactor oversight process at existing reactors, and those three divisions reporting to him, so he is really the focus point. And he's a very experienced executive in all those areas, and so we're very fortunate to have him be my delegated lead responsibility in that area. And then thirdly, we created a third associate director under Gary Holahan's leadership that is dealing with the new reactors, the risk-informed regulation, and then a lot of the activities that we have a rulemaking and special projects division. And one of the Lessons Learned as we went through the reorganization was our focus on day-to-day licensing activities and operating reactors had suffered a lot by what I would call the collateral duties of the project manager. The lead project manager for security coordination, for instance, for the past few years, I don't know how much time he's had to really focus on his plant.

Similarly, the lead project manager for GSI-191, containment sumps for PWRs, he's been focused -- he's been distracted, I would say, from his traditional licensing responsibility, so we've broken out those responsibilities to focus on operating reactors under Bruce Boger's leadership in the Office of NRR.

MR. REYES: And if I could add, regarding the regions, they have not been distracted by this, and we enhanced the budget allocation of resources to the regions based on the Davis-Besse Lessons Learned. And that has proven to be a very good way to give them additional resources so they could deal with any turnover they experience, so we want to make sure that the baseline is executed per the design. That's the backbone of the whole reactor oversight program.

# COMMISSIONER JACZKO: Thank you.

CHAIRMAN DIAZ: Commissioner Lyons.

COMMISSIONER LYONS: Well I very much appreciate the briefing, and appreciate the evidence of both staff action and staff planning, towards what is obviously a most uncertain future. This morning there was a lot of emphasis on the quality of applications, the need for high quality applications, and that certainly came through in your comments, as well. Certainly from my perspective, I hope that as we or if we develop any sort of a queue, that we take into account the quality of the applications, and that we give far more weight from a scheduling standpoint to those applications that are complete and are of the high quality that we have to demand.

I mentioned this morning the suggestion that industry should be at least seeking an opportunity to comment on the production tax credit regulations. I hope that DOE and Treasury also provide an opportunity for the NRC to comment on those regulations, because I find people within the NRC, all too many assume that the production tax credit simply goes to the first six plants. That's simply not the case, and depending on how those regulations are worded, it could put very different degrees of emphasis or stress on the NRC process as to how you even define what are the first six plants. So I think it would be very important - I hope we're provided an opportunity to comment on the formulation of those regulations which are not our responsibility, but they do have the potential of complicating our lives rather substantially. So that's another point that I would hope to make.

On Part 52, I'm very interested in the suggestions that Commissioner McGaffigan has been making, but I'm assuming that, Commissioner McGaffigan, you will comment, so I'm just going to leave that to you. But I'm very interested in the suggestions you've been making.

A couple of questions - I've completely lost track of the status of whatever is going on in Galena. That's not mentioned anywhere in your charts now.

MR. REYES: It's frozen.

COMMISSIONER LYONS: That's a very good answer. Do you have any information as to whether that's on the table, off the table?

MR. REYES: No significant exchanges with the staff other than the early discussions we had.

MR. DYER: We held the one pre-application meeting which is, we hold one meeting for an orientation to explain our process, and then if they wish to proceed with additional meetings, then we open a pre-application review docket and start billing. But we haven't had any further --

COMMISSIONER MERRIFIELD: We did send a team up to a Native American meeting to explain our process.

CHAIRMAN DIAZ: There's a budget request for Alaska

for \$500,000 which I don't know where it ended up, but --

COMMISSIONER LYONS: I thought it went through. At least I thought it was. That's why I was asking. I thought that that planning grant had gone through.

MR. REYES: In terms of exchange with the staff, other than the early exchanges, and we did go to the local community to explain our process, we haven't done any, and they have not approached us.

COMMISSIONER LYONS: And another comment in that same general area - the so-called next generation nuclear plant, NGNP at the Idaho National Lab is authorized in the Energy Bill, is at least pretty well funded in appropriations. I have no idea what dates DOE may be approaching the Commission for licensing actions, but I can imagine that on the time lines that you're projecting now, you probably have to be reflecting the probability that something will be coming in on that reactor, as well. And that's very likely to be, well, it almost certainly will not be a light water reactor, so it will present some different and unusual challenges.

COMMISSIONER MERRIFIELD: Probably some time after we receive the Yucca Mountain application.

MR. REYES: Well, we will be engaging the Commission early next year on the FY 08 budget, and that would be the way to address that if we had intelligence on that.

COMMISSIONER McGAFFIGAN: My concern on that, Commissioner Lyons, is that we're going to assign good people to that, and my understanding of the time lines is they're talking about perhaps having the plant operating in 2021 or something, so if we divert good people who could be working on SRPs or other stuff that's relevant to tidal wave that we're about to hit, because DOE is willing to pay. As I understand the Act, DOE will pay for this stuff..

MR. REYES: I have to make a plug for something, budget assumptions. That's why we present the Commission budget assumptions. We need to plan and we need to put a budget based on assumptions, and whatever the assumptions are that are endorsed by the Commission is what we'll prepare. And we'll be sending you those soon for FY 08. At the beginning of the year, you'll see us starting to get working on FY 08 planning assumptions, and budget assumptions.

COMMISSIONER MERRIFIELD: Well, I'll put in a plug, too. The staff should be relatively specific in terms of the budget assumptions it asks of the Commission as it relates to these types of things.

MR. REYES: Yes. You gave us that feedback before, and we're going to rise to the occasion and try to be as precise as we can.

COMMISSIONER LYONS: With regard to Commissioner McGaffigan's point and then I'll stop - there does seem to be substantial uncertainty in the date for that. Certainly, the Idaho Congressional Delegation is pushing one date.

COMMISSIONER MCGAFFIGAN: The Office of Management and Budget is pushing another date.

COMMISSIONER LYONS: Yes. I don't begin to know what's correct, but I would anticipate that at some point we will be

seeing it. I'll stop here, and I assume there'll be a second round.

CHAIRMAN DIAZ: Yes. Commissioner McGaffigan. COMMISSIONER McGAFFIGAN: Let me take up the issue of Part 52. We heard a lot of negative comment this morning. I met with some of the staff last week that deals with this issue, and asked them when the decision was made to renotice a proposed rule, and you, Jim, were the highest level person fingered at that briefing as having been party to that decision approximately the summer of 2004. And I think one of the staffers said neither you nor they were prescient enough to realize what was coming. And you might have made a different decision, so I'm going to give you an opportunity to just explore whether today we need to make a different decision.

I've gone back and looked at the SRM and the paper in 2003, and admittedly it's grown. I mean, it's now 500-odd pages and back then it was only 200-odd pages, the Federal Register Notice and the rule language. But it struck me that it dealt with several important issues, and we could complete it. We could complete it relatively rapidly if we were to resolve the comments and see how much of what you now want to propose can be done within the previous proposed rule and the comments on it.

Somebody was mentioning this morning in a side conversation about severe accident management, and one of the things we gave you - one of the recommendations we gave you in our May 6, 2003 SRM, which I think came from the Chairman, was that we were going to use the substantial increased threshold rather than more the minimal increased threshold. There's a bunch of stuff that it if we finish that rule we could tie down and be absolutely clear, and do it soon, as opposed to sometime in the future.

My fear is if you put out the rule as it's before us, it's not going to have a 75-day comment period. It'll end up having a longer comment period because people will just groan under the weight of it and say we need more time. And then it's going to take us -- you'll get varying comments that'll have to be resolved, and any threshold - any schedules for resolving those comments may be as amorphous as the schedule that we had in 2003 for resolving the comments in the 2003 rule. So what is, it's a long preamble, how difficult would it be to open up for us an option in-between doing nothing and doing the proposed rule that may take a long time?

MR. DYER: Commissioner, we spoke after you spoke to the staff. The staff came back and obviously briefed both Dave and I on it. And the challenge is that we had not prepared the changes as a result of that first round of public comment back in 2003. We chose a different pathway to take the reference rule and re-propose it. And so we'd have to go back to square one, start with the existing rule as we published it, and then lining up –

COMMISSIONER McGAFFIGAN: And all the comments. Right.

MR. DYER: And all the comments, and do that. And so that's going to take us several months to do. In the meantime, we have put together what we thought was a proposed rule that made additional improvements.

CHAIRMAN DIAZ: What I think we are asking is what is

the difference, what are we gaining with the new modification to Part 52 versus what we had already gone through in 2003? Is the gain significant, so that we have to actually consider, or is the gain small enough that we will gain in time and predictability by going back to that and filling the blanks in. That's what I think the issue is.

COMMISSIONER McGAFFIGAN: There's got to be a lot that could be done by finalizing the 2003 rule, and just resolving the comments. There's got to a lot. I see heads shaking the other way in the audience, but I went back. There was an awful lot of substance to that 2003 rule. Does it do a perfect walk-through from Part 50 to Part 52? No. Could that in resolving the comments that you obviously got, is it within the Administrative Procedure Act guidelines on rulemaking to put in the table that does that in some way, without rewriting all of Part 52? There's got to be some creative thinking as to what can be done in resolving the comments, and apparently it hasn't been done.

COMMISSIONER MERRIFIELD: I think the Chairman termed it very well. I mean, I don't really, when I asked my questions this morning on that, I don't have a set position on that, but I think the way the Chairman framed it - what's the additional value of going beyond where we were before, and does it justify what –

MR. DYER: Can I take that as an action item away from this Commission meeting. Anything we'd say right here would be largely anecdotal off the top of Dave's head.

COMMISSIONER McGAFFIGAN: Okay. I just -

MR. DYER: Not off mine. I wanted to correct it, I thought it was like my first or second week here on the job that I was briefed on

Part 52.

COMMISSIONER McGAFFIGAN: Okay. Well, I'm not trying to indict anybody. I am looking for a middle option that is well fleshed out so that we can make a decision, an option that we don't have today. And I think it's also worthwhile to pick up on the - I'm losing my time here - to pick up on a comment that was made this morning about the staff going dark for long periods of time. In any of these areas, this pre-decisional thing we hide behind, I thought we had solved in on 65.84, and 50.59, and where ever where we ran a relatively open process up to the Commission's final decision to approve a final rule. And I hope people are not -- as you're trying to weigh the benefits of completing the 2003 rule versus finalizing this rule, we do so with open discussion. It doesn't have to, I don't think I'm violating any Administrative Procedure Act procedure if I have a discussion in a public setting about what the benefits might be of the two approaches. I'm looking at Karen, am I? Because we've done it.

MS. CYR: You want to understand what the difference is between the two.

COMMISSIONER McGAFFIGAN: Right. We're just trying to get a delta, so I think industry could help you in terms of understanding that delta.

CHAIRMAN DIAZ: Okay. Commissioner Merrifield. COMMISSIONER MERRIFIELD: Yes. I don't think it's necessarily a function of -- it may well be the staff makes it as a third option. It may well or not. I think in answering the Chairman's question, the answer to that may be that what the staff came up with is the right option. I don't personally know. Or maybe not, but I mean, I think -

CHAIRMAN DIAZ: We don't know.

COMMISSIONER MERRIFIELD: We don't know. We need to flesh that out. I want to take us back on a little bit of a different tack. We had some discussion earlier on the panel relative to timing in how long it takes us to do things. One of the issues is how long does it take us to review a combined operating license application. And on reflecting back, COLs and design certification. When we were doing the earlier design certifications, those were at a time where, although there was a gleam in the eye of the vendors that they would have a sale, there was nothing really impending at that time period. And so we did have to sort of an extent a luxury of time to go through it as we saw fit. Now we clearly have an obligation to do a thorough job in terms of design reviews, but I think from my personal standpoint, I think our staff has done a very good job of showing efficiencies in terms of reviewing design certifications, and I would somewhat push back at the staff saying well, it's got to be a set period - five years. If you want to do the design certification, its five years. I think given the reviews that we have underway, we're going over a number of issues we've had before, and I don't think the Commission should let up on the desire for the staff to be efficient, and that certainly, it would seem to me, could engender a design certification that would be less than the time that we've had previously. Would that be a fair question?

MR. DYER: Yes, sir. I think what we're trying to do right now is just get our benchmark. And I guess we've learned some lessons from the AP 1000 review which we're applying to the ESBWR

review as far as some of our up front work and setting good acceptance criteria as they come in, and that's going to result in some across the board –

CHAIRMAN DIAZ: I think Commissioner Merrifield is bringing up a point, that in the technical plain is very important. We learned a significant number of difficult technical issues very well during the three previous design certifications and the present one. We improved the probability of doing thermal hydraulics modeling. There's a series of things that the agency has moved forward. We have additional experimental capabilities. We have all of those things that have been done, and I think what we need to do is leverage that in the real technical manner so some of these issues are not just reopened again. They have to be reopened with the knowledge that exists, and that should be able to move us significantly forward with significant amount of technical know-how because we have done it. It's not like we were back then, so there is a new body of knowledge. There is knowledge, there is know-how, and that needs to be used, and that should be able to be in our favor to provide a better safety case in a shorter period of time. I'm sorry.

COMMISSIONER MERRIFIELD: No, no, that's fine. I think part of our role is to challenge the staff to do that, and I would certainly want to leave that feeling, as well. Frankly, another issue is the Boards. I think we've challenged our Boards to do a better job of reviewing these issues in a timely way, and I think to his credit Paul Bollwerk and the very good judges we've got over there now have done good work in enhancing them.

I want to switch over to slide 15, because this is a related question to the matter. In this slide, we have laid out the expectation of what we're going to have in FY 2006, 2007, and 2008, and I've seen some of the GAN charts we've put together in terms of how that all plays out. That very much is reflective of what I mentioned today. We assign a certain number of FTE and a certain number of dollars to each COL application. We have all been collectively urging our licensees and our vendors to try to get together, let's have a Westinghouse group, a GE group, and an AREVA group, and to their credit, the licensees and the vendors say yes, we agree, Westinghouse, GE, AREVA. I think the framework, however, that we have for our applications is still reflective of looking at Duke, Southern, Progress, and others in a series. And so my question and my challenge to the staff is how are we thinking about dividing this in a way where we are dealing with generic let's say Westinghouse issues as a whole, that we can really deal with one. I would guess that probably 85 percent of the work we're going to do, and separate that out from the 10 or 15 percent of the work which is sitespecific, so that we can gain much greater efficiency in terms of getting that as a group, assuming the licensees have the discipline to give us applications that are the same. So that if you have a Progress unit have a well, I won't point out a particular licensee. If licensee X, Y, and Z all decide they want to buy a certain vendor's reactor, that they all look the same, so that we can divide that which is similar in all three applications, versus that which is site-specific.

MR. DYER: And, Commissioner, yes, sir - we have discussed that, and we mapped out -- when I addressed some of the

chief nuclear officers at the ANS conference, my one pitch to them was the need for standardization and cooperation among them, which is no small feat. And today was the first time I'd heard that that was, in fact, the approach that was going to be taken.

But in parallel with that, the key thing that I think we in the NRC have to do is take our planning and scheduling capabilities up a notch, an order of magnitude, literally. And what I asked the industry at this meeting was, I saw them go through that when they put the focus on planning better outages. And I think our challenge right now is much the same. We're where the industry was when they were still doing 45 and 70-day outages, and not the 25-30 day outages, and didn't the kinds of integrated scheduling capability. What we need to have the capability to do is for those topical reports, to develop the standard input, to recognize that that's going to accomplish this chapter in this safety evaluation, and focus on what key technical issues are going to be solving the problem, as the Chairman said, or has been solved, and where it can be applied in the four or five applications that we see coming in the future, and what does that do for our schedule? We simply don't have that capability right now, and that's something that I took as an action item in the discussion in the industry as part of their forming their committee. And we want to work -- and not only that, make it an open capability where we could reflect the schedule on our website, or have it available for anybody to challenge us, and to say there's a better way of dealing with this issue.

MR. REYES: I want to give credit to the staff. The GAN charts you saw, we had the schedule based on the history we had before,

which is every person came in with a different approach. The staff has put a list of actions that we have taken, and I used the word earlier today, team reviews, to try to take advantage of exactly what you're talking about. Now that the industry is talking about getting together and providing to us submittals that we could review in the team approach, even though it may be multiple sites, we'll be glad to approach it differently and schedule it differently.

COMMISSIONER MERRIFIELD: Well, I think Bru Barron's suggestion that we have a workshop is a good one. I think this is clearly needed here. It strikes me, and I used the example this morning, FAA, when you have airplanes, you go to Boeing and you buy a Boeing plane, and you don't have a lot of choices. You have a paint scheme, choose one of two engines, and you can choose the cockpit you want. Other than that, it's a 737. And I think we've got to align our processes in such a way so that if somebody chooses a Westinghouse reactor, GE reactor or AREVA reactor, we're going to be able to get through those in a very timely way, which would seem to me much more in line with the kind of process that we need, and what licensees are expecting.

MR. REYES: The industry approached us for a workshop last week, and they're trying to get one scheduled in December, so we are already trying to do exactly that.

MR. DYER: And, Commissioner, the one thing I'd like to say - I can't underestimate the amount of cooperation that that takes. What the industry is saying is that they're willing to -- if they were going to build an AP 1000 at one of their existing sites and they had a

particular methodology they had already used as this site, they're willing, instead of having consistency across that site, they're willing to make their process or their methodology consistent with another utility who's building an AP 1000. And so –

COMMISSIONER MERRIFIELD: I'm sorry. Let me make a comment here. NEI has spent a lot of time and effort over the years to take an awful lot of members of Congress and staff members over to France to show them the benefits of uniformity. And my sense is NEI really believes that, that the industry really believes that, and that's perhaps the way they ought to emulate it. Thank you Mr. Chairman.

CHAIRMAN DIAZ: Thank you, Commissioner Merrifield. I was trying to listen to the relationship of the aviation --- I think what I heard was that speciality items take a long time to be able to get out of the assembly line, is that what you were saying sir. Let me go back and hear, I think that we still have time, first, let me address an issue that I think Commissioner Jaczko mentioned that, of course, has been a main topic of my concern, that we're not going to take attention from the operating plants at all. I think what the Commission has seen, and especially Commissioners McGaffigan, Merrifield and myself, was that several hours, eight hours a day that was being consumed because we needed to resolve the security issue is now having pay off, and that we are reassured that the right things are being done. And now we can do something else.

I need to talk a little bit to the staff regarding the use of words. As you know, somebody said one time that I lovingly mangled the English language, and I do, but I also get very concerned with the way the English language is sometimes used. I would take the word "certainty" out of your presentation because we're talking about predictability, finality, stability, all of those things. But the reality is that we don't have the certainty of what the process is because we don't have enough knowhow. It's not a mathematical equation that we put numbers in, two plus two equals four. So it's all those good other things that we have always been saying, but somehow that word crept in, and I don't think it really does us good.

I also saw something that says that, again talking about the way we address issues, we want to safely complete the reviews. I think we want to complete the safety reviews. We don't want to safely complete the reviews. I don't know what safely completing the reviews is, because I don't know who is being safe in there, so just a couple of little things.

But let me ask one question now that I have my time of fun in here. For example, the issue of the Part 52, and how things are, and why it has to be a predictable pathway for any changes. You take any of the things in the new Part 52 - I'll just take one, for example, and it says, "the applicant environmental report for a COL application referencing an ESP must contain any new or significant information on the site or design." However, new or significant is not defined - what is new, or what is significant. That's where I believe this new level of definition that we need. This is when we compare 2003 to now, it's that level of detail that we want to have assurance that it has been clearly defined. Because you used the word "significant", I remember I went into a room many years ago in here trying to eliminate the word

"significant" from the NRC language and I failed because we were not going to be left with much once we took the word "significant" out of the regulations. But I still insist that if you put significant, there should be a definition of it. So any comments on this issue of Part 52, and how can we be assured that these definitions, the wordings actually mean something that we can put a value to it.

MR. MATTHEWS: Excuse me. I'll make one comment, and particularly in regard to -- I accept that challenge with regard to new and significant. That particular requirement, though, needed articulation in terms of the need for a procedure for them to assess whether new information appeared or existed affecting the prior findings of the prior environmental report that was relied upon when an ESP was issued. Consequently, there was a void that begged the need for a procedure and a process to make them represent to us what had changed, and then we thought we needed to apply a criteria in order to avoid the need for them to ascribe every change regardless of its significance.

CHAIRMAN DIAZ: I fully understand.

MR. MATTHEWS: So we established a threshold, and I think we introduced yet another problem.

CHAIRMAN DIAZ: And that's precisely what I wanted to point out. That yes, we needed to address it, but we might be introducing another problem. Start our second round, Commissioner Jaczko.

COMMISSIONER JACZKO: We talked a little bit about, I think Mr. Matthews, you used the word, I think, regulatory gap for the AP 1000, some issues with acceptance criteria. I wonder if you can just give me a couple of specific examples of the kinds of things in there where you see those kind of gaps right now, very specific.

MR. MATTHEWS: I'd be hard pressed to list specific systems or commitments that were absent. But Part 52 has a provision that permits them to establish acceptance criteria for those portions of the design that they are yet unable to provide to us, or unwilling to invest in for closure. And those design acceptance criteria appreciate the fact that there's a time dependent nature to the evolution of some of these designs, and so I view them as -- they fall into the category of deferred work.

COMMISSIONER JACZKO: And can you give me maybe just a general flavor for what the –

MR. MATTHEWS: Maybe Jim can help me out.

MR. DYER: I think the largest one that we see is the seismic concerns, and the as-certified AP 1000 has a very limited siting qualification. And so any soft-soil sites in the United States would have to be re-evaluated in the seismic reviews, which is a very substantial review.

COMMISSIONER JACZKO: That would happen in a COL.

MR. DYER: And that would have to happen in the COL.

MR. MATTHEWS: And I think I can add to that now that I've put my brain in gear. Such things as digital INC, such things as control room design are typical of the deferred items that appeared at either a list of COL action items or design acceptance criteria. They're major segments of the review, major in the sense that they take a lot of resources and time to evaluate, so that's typical of the gaps I refer to.

MR. REYES: You could address those before the COL is submitted. Nothing prevents you –

COMMISSIONER JACZKO: With an additional rulemaking then.

MR. REYES: Well, what you do is you -- well, first of all, you do the calculation from the base mat of the facility on the particular seismic considerations, and the staff will be glad to review that before the COL. So there's nothing there that cannot be done before the COL.

### COMMISSIONER JACZKO: Okay.

MR. REYES: Assuming you have the time and invest the resources to do that.

COMMISSIONER JACZKO: Jim, just switching gears for a little bit. One of the things that I think, as I mentioned this morning, one of the parties in a sense that hasn't been here yet, and I think at some point we'd like to hear from them, which is just the public, broad scope term for a lot of people, but I think a group, or individuals in that group that will play an important part in whatever new reactor licensing activities we have. And one of the things that was mentioned earlier was the concept of a workshop to deal with some of the issues for licensees to explore various review plans and kinds of things that would be helpful to the licensee or potential applicants as they come forward. Have you given any thought to holding workshops, and maybe would be done through General Counsel or other office, to help potential interveners better understand our processes, again with the idea of trying to develop guidance and documentation to facilitate their participation really in a timely and efficient way.

MR. REYES: We have done that specifically in early site permits. We go to a site. We have public meetings during the day in the evening to explain that process. And you know we do it also in license renewal, so there's no issue with doing it for a COL process.

CHAIRMAN DIAZ: Okay, Commissioner Lyons.

COMMISSIONER LYONS: Jim, in your comments on the construction program, you indicated the possible question at least of where that program might be sited, and you pointed out the potential benefits from the standpoint of hiring if the program could be located or partially located within the regions. It strikes me as an extremely good idea, and it's an idea that has come up as I visited some of the regions this last year. And I wonder if there has been any consideration to expanding it perhaps beyond the construction program. I would think that with the electronic communication means we have available today, it would be possible to split several programs among sites and perhaps take advantage of what I think will be the enhanced ability to recruit, if we take more advantage of the fact that not everybody has to come to Washington.

MR. McDERMOTT: It's easy for me to say, but it's up to the program directors to do, so that I would defer to Luis and Jim as to how hard we can push this. I do think we have an edge if we can keep stuff out of -- people buy in West Virginia now if they come to town, so if we can do it out in a region, it's probably a good idea to do it. But exactly what can or can't be done in the region, not my job.

MR. REYES: We have not looked into that. For

example, we have not thought of moving licensing activities to the regions or moving inspections to headquarters. What we're concentrating on and what you'll see in the January Commission paper is the structure of the construction program, center of expertise, how will we approach it? But we have not tried to pursue that further than that.

Now the Commission has previously decided on centralizing some programs, and we have some regions that have unique programs only to that region, but we haven't pursued the issue of decentralizing licensing, for example, for new reactors. We're not there yet.

COMMISSIONER LYONS: Well, I can't help thinking that with the electronic communications that we have today, it's at least possible. And I could well imagine that with the challenges we're going to have in recruiting, we better take advantage of any extra capabilities we have, and that is a very real one to offer potential recruits an opportunity to select among five locations. I hope you consider it seriously, because I think it might help. I think that was the only one I had sir.

CHAIRMAN DIAZ: Okay, Commission McGaffigan. COMMISSIONER McGAFFIGAN: This is a question for Karen. There's been talk of an interim final rule on Part 52 from the industry folks. My staff first heard the words on Monday of last week. My understanding is we've done one interim final rule in the history of the agency, and that we can only do it for good cause, whatever that means. We bypass the notice and comment prerequisites under the Administrative Procedure Act, but then we still are open to comments. And we can resolve the comments three ways; we can reject the comments and issue the interim final rule as a final rule. That's one possibility. We could modify the interim final rule based on the comments that do not require republication, but the third possibility is we have to publish a new interim final rule, which is essentially a new proposed rule, because the comments went outside the scope, and we have to republish. If I have that more or less right, and I'm playing lawyer here, that doesn't sound like a prescription to any finality, if that's what the industry is looking for.

MS. CYR: No, and the nature of the things that they describe, again it was very brief in terms of what they were describing here in terms of things that they thought might be candidates for that, or perhaps something where we have done direct final rules in terms of certain categories of things, were things like aspects of implementation of the Energy Policy Act. We've already done a couple of those, where we just went to final rule because we said they were strictly ministerial, the ones with the Price-Anderson Act changes and the elimination of the Anti-Trust reviews. The only other thing I think comes to me is the term of the COL, I think.

## MR. DYER: Have we done that yet?

MS. CYR: And we've not done that, and that's another one that might be a given -- it's a fairly simple implementation -- that's another one that might be something – what's to comment on? I mean, the question is -- there's very limited opportunity for comment.

The other thing they seem to suggest were if you truly had changes where you had to reference Part 52 in other parts -- this is

the way I understood what they were saying – what you were missing was, in a sense, a reference in some other part of the rule to Part 52 because you didn't go back and clearly incorporate 52 into all the rest of your regulations. If there are aspects of that that were more in the ministerial category as opposed to really discretionary judgment kinds of things, those are the kinds of things that might be candidates for closer to an interim final rule or direct final rule because there's unlikely to be –

#### COMMISSIONER McGAFFIGAN: Any comment.

MS. CYR: -- real comments or suggestions about it. Now again, if you're really getting into the category of there's a real judgment here, that there's real ambiguity about whether or not a particular portion of some of the rule was meant to be part of the Part 52 process, then you would be raising questions of whether that kind of thing would be something that would engender comments, and it would take you into another round of rulemaking, so I'm not sure whether you would have very much that would truly be a candidate.

COMMISSIONER McGAFFIGAN: That's my guess, but I -- maybe the lawyers for the folks who are going to be sending in NEI letters might give you a call as to what they have in mind. This issue that Commissioner Jaczko started talking about this morning with the industry, and I think it's real. I mean, I'm all for efficiency and effectiveness, but 12 instead of 4 is not going to be easy to do. The question he asked was, would you rather a couple go through fast - we decide the couple - or all of you go through at the ponderous pace that will be required because we're parallel processing too many things at once. Does the staff have a desire? We have fixed resources, which would you rather see, a couple that get crossed the finish line, or everybody get across the finish line slowly?

MR. DYER: I want a win in the column. I would like to see get one that we feel very comfortable is a good high quality application and –

COMMISSIONER McGAFFIGAN: Get it across the finish line. I'd like an existence proof too, so if you are counting votes, I think we have to get a couple across the finish line, rather than all of these folks sort of sitting around, and the quality depends in part on do they have ESPs, do they have design certs already, how many of these design cert issues that were postponed to the COL are serious, how many aren't? But it strikes me that this January paper is going to be very important, because even if Congress gave us resources that were triple what we were asking for, we couldn't hire triple -- we can't go to a thousand people a year, or it wouldn't be a thousand, it would be 150, plus 200, plus another 2 - 650 a year. We're not going to find 650 qualified people a year to be working at this peak. We have to do a few, and then try to get efficient.

MR. REYES: Yes. I subscribe to the third option, which is that I think we can do a lot in a different way. In other words, if you had all the AP 1000 customers get together –

COMMISSIONER McGAFFIGAN: And handle these seismic issues –

MR. REYES: And they tell you even the wallpaper in the control room is the same color, you know –

COMMISSIONER McGAFFIGAN: My stomach started to

sink as I listened to Dave earlier talking about INC issues and control room design issues not being solved yet - that's a prescription for I'll take Option A, and I'll take Option B, and I'll take Option C.

MR. REYES: My point being is that we have never been in the situation where we are now, which is the industry coming together and saying we're going to come as a group with the same design. So now that would solve a lot of our review issues, because if everybody is doing it the same way, it's much easier to deal with.

COMMISSIONER McGAFFIGAN: But some of the issues, I'll just say, are site-specific. I mean, emergency preparedness is always site-specific, security - a lot of that is site-specific, environmental issues as to whether you need cooling towers or you don't need cooling towers, and the fish kills, and all these things that bring in other agencies are site-specific. And you may have 85 percent commonality, but the 15 percent that isn't may be where the 100 percent of the contentions are.

COMMISSIONER MERRIFIELD: I was going to say, not to horn in on your time, but I –

COMMISSIONER McGAFFIGAN: My time is gone.

COMMISSIONER MERRIFIELD: I mean, part of it also depends, however, if you have an existing site - if you have an existing site, you're talking about an amendment to an existing security plan, and a strategy you already have for emergency planning, so there are site-specific variables.

COMMISSIONER McGAFFIGAN: At Bellefonte, I'm not aware that we have any of the above.

COMMISSIONER MERRIFIELD: Well, there obviously, that's on where --.

MR. REYES: But if the design of the facility is the same, then you have 85 percent of the SER. You have it, and then you deal with the remaining, so my point being –

COMMISSIONER MCGAFFIGAN: One hundred percent of the contentions in the 15 percent that –

CHAIRMAN DIAZ: But they are different contentions. The reality is that if the real issues in the safety case are identical, and then we just add variations to it that go into the seismic domain of hydrology, you have a different way of dealing with it. It is a lot easier.

COMMISSIONER McGAFFIGAN: I don't expect we're going to get contentions about control room design. I don't think we're going to get contentions, maybe we will on digital INC, but we will get contentions on things that we've historically gotten contentions on.

COMMISSIONER MERRIFIELD: The point is, I think, that we need to be realistic about this, and there are going to be issues that are going to cause us to have to focus a lot of time and energy. And there are issues that once we resolve it should be able to be replicated in multiple sites. And we don't need to reinvent the wheel at every given site for issues that have been well settled, and had a hearing in many instances.

CHAIRMAN DIAZ: Commissioner Merrifield you are on your time.

COMMISSIONER MERRIFIELD: We talked a little bit this morning, and you have in your slides on page 9, a bit of a discussion

about the multi-national design approval program, and obviously that's a new opportunity for us. We have engagement with a two of our traditional partners, Finland and France, and I'm wondering if you'd talk a little bit about how we intend to use their expertise, and how that may impact the review schedule for the EPR.

MR. DYER: I can talk about the first part, but I'm not sure about the second part, about how it will impact schedule. Obviously, we think it could help us better our original estimates on the schedule, but obviously, Finland, they're building the EPR in Finland, and France has been very involved in actually setting the design criteria, French regulator in setting the design criteria for the EPR design, so they have done a lot of coming up to speed that we have yet to undertake in our pre-application review process. And that's where we really see the benefit or the potential benefit, is the orientation coming up, what reviews they did, what analysis they did, what answers they got, how does that apply to our acceptance criteria. And that streamlining will be very beneficial to us in also doing our overall safety review.

As it relates to the schedule, obviously, we think it'll improve the schedule. Is it going to be from a pre-application review schedule or the design certification review schedule, I'm hard-put right now to come up with an answer, but it will streamline our process.

MR. REYES: I think the key issues are there should be a final design because it will be constructed and operated, so we're at a different point in terms of -- and then to the extent that our colleagues have done a safety review, and to the extent that it meets our regulations, then we should leverage that, and it should be very positive, because you're no longer talking about something on paper, it's been finally designed, it's being constructed. It may be pre-op by the time we start our review.

COMMISSIONER MERRIFIELD: Last comment I'll make, and then I'll give back the rest of my time. I made mention of a few FAA-related issues today, and I've learned a little bit about their process. There's one issue I think is relevant for us to think about, and I may be the only one who feels this way, but the FAA doing design certifications for airplanes to be sold in the United States has two criteria. One criteria is that the country from which the plane has its origins, that plane also has to be built in that country. It has to be approved by the regulator, it has to be considered for use in the host country, which is an interesting criteria.

The second one is there has to be a live body that wants to buy it. There has to be someone in the United States that actually wants to buy the airplane before the FAA will conduct the review, because they have limited resources, and obviously a lot of demand. I think those are two interesting criteria for us to examine down the road. Thank you, Mr. Chairman.

CHAIRMAN DIAZ: Thank you, Commissioner Merrifield. I think rather than doing anything else since it's late in the day, I'd like just to summarize the fact that what I see is a significant amount of engagement. I used two words that I've been warned not to use - one was significant, which means it's undefined how we're all going to be engaged, and the other one is engagement, which my good old friend Maria Lopez-Odin was always very wary of using because she was

always concerned how far do you want to take an engagement. But in this particular case, it is really significant, and it is really engaged because as we see, there are many, many issues, and many of those I think eventually will become policy issues that will have to last a few years. And so the earlier that we define these issues and the earlier the Commission can really deliberate on it, I think the better the country will be served. And after all, we're here to serve the country, and that's what we intend to do.

With that, any of my fellow Commissioners have any departing points?

COMMISSIONER MERRIFIELD: Mr. Chairman, in the spirit of that comment, I took a class a while back – a management class – where they talked about an ambidextrous organization, one that has the ability to deal with multi-tasking and changing environment, not as fixed on one specific output and criteria. And I think we have done a lot to change us into an ambidextrous organization over the years, and so while we may face a varied task, I think we can call a few audibles and meet those challenges. Thank you, Mr. Chairman.

#### CHAIRMAN DIAZ: Thank you.

COMMISSIONER McGAFFIGAN: I don't think we have grown any additional hands for the staff –

CHAIRMAN DIAZ: Thank you, Commissioner Merrifield, but just to end the meeting, I was left-handed until I was nine years old. Thank you very much. We're adjourned.

(Whereupon, the proceedings went off the record at 3:38:05 p.m.)