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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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PUBLIC COMMENT MEETING ON THE ENVIRONMENTAL STANDARD

REVIEW PLAN

(NUREG-1555)

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WEDNESDAY,

DECEMBER 12, 2007

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The meeting was convened in the
Commissioners' Hearing Room of One White Flint
North, 11555 Rockville Pike, Rockville, Maryland, at
12:30 p.m., Chet Poslusny, facilitator, presiding.

NRC STAFF PRESENT:

CHET POSLUSNY

ANDY KUGLER

PAUL HENDRICKSON

BRENT CLAYTON

JIM BIGGINS

RICH EMCH

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ALSO PRESENT:

BILL MAHER

JON CUDWORTH

RUSS BELL

APRIL RICE

TAMAR CERAFIGI

DAVE ANDERSON

MELISSA DUBINSKY

MIKE WARWICK

VAN RAMSDELL

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

12:37 p.m.

MR. POSLUSNY: Okay. It looks like we're ready to start the meeting to discuss comments on the environmental Standard Review Plan Update has now begun.

Welcome invited participants. Stakeholders from various organizations, the NRC Staff at the table and in the audience and interested members of the public.

Specifically, we have representatives today from Office of New Reactors at the table, Office of General Counsel, PNNL, one of our contractors. From industry we have NEI represented, Tetratech, Florida Power and Light and Enercon.

And there will be others speaking as we go along. We'll introduce them.

This is a public meeting of Category 3 type <with> participation sought from NRC stakeholders, members of the public, other parties who are interested in the NRC's environmental review process.

This is a follow up to a previous meeting that we held regarding the ESRP

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<Environmental Standard Review Plan> Update. And I want to emphasize that we are not seeking new comments at this meeting. We are simply -- not simply, but we will be discussing the comments that we have received to date.

My name is Chet Poslusny. I work for the Office of New Reactors in another branch. I will be facilitating today to help us to stay on target. I know we have an ambitious schedule.

I'd briefly like to talk a little bit about the agenda.

We're going to talk about -- we have about six, seven topics. We're going to go through starting with Need for Power, Transmission Lines, Site Selection Process, Socioeconomic and Environmental Justice Issues, the Cumulative Impacts, Accidents and some other issues for which we received comments.

We have sign-in sheets like we said on each side. Just make sure you use them.

We are transcribing the meeting so when you start speaking, please mention your name and your affiliation.

And there may be some times where the

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gentleman didn't hear what was said and you might have to repeat, so bear with us. It's important for us to transcribe this so we make sure we have the record of what happened today.

We talked about the NRC Form 659 and if you have time to fill it <out>, we'd appreciate your feedback on the meeting.

I'd like to quickly begin with quick introductions around the table starting with Andy. Push the <microphone> on before you start please.

MS. CERAFICI: Thank you. My name is Tamar Cerafici. I am an attorney with Ballard, Spahr, Andrews and Ingersoll and I am on the NEI Working Group for the comments.

MS. RICE: My name is April Rice. I'm with SCANA.

MR. BELL: I'm Russell Bell with NEI. Thank you.

MR. CUDWORTH: John Cudworth from Tetratech.

MR. MAHER: Bill Maher, Florida Power and Light.

MR. BIGGINS: Jim Biggins, Office of General Counsel, NRC.

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MR. CLAYTON: Brent Clayton from Office of New Reactors.

MR. KUGLER: Andy Kugler, Office of New Reactors.

MR. POSLUSNY: Do we want to do the telephone contacts? Oh, I'm sorry.

MR. HENDRICKSON: Paul Hendrickson, Pacific Northwest National Laboratory.

MR. POSLUSNY: And those on the phone?

MS. FUENS: Currently, there's Lisa Fuens and Dusty Miller with Black and Veatch from Kansas City.

MR. KUGLER: Okay. Thank you.

MR. POSLUSNY: Okay. You want to use that -- we have a couple of new players here.

Okay. Let's get started. Andy would like to make some opening remarks.

MR. KUGLER: Okay. Thank you, Chet.

Going to get my slide up here first. Oh, you're going to do it all.

Okay. It's multi-tasking again.

This meeting is part of the ongoing work the staff has been carrying out to update the Environmental Standard Review Plan or ESRP.

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So, far we've prioritized the sections, we developed revisions for 40 high-priority sections. We developed new sections in some cases.

We held a meeting on these sections in August where we collected comments. We also received two comment letters and at this point we've reviewed all the comments. We've developed our responses to most of the comments and we'll discuss those today.

And in the meantime we've also started working on some of the moderate priority sections to get those updated. We're doing those in parallel and also we're working on licensing and pre-application work so we're working on the moderate sections as time permits.

As I mentioned, we've developed responses to most of the comments we received. Yesterday I sent Russ Bell a file that listed the comments which we basically completely agreed with.

We didn't have any problem with them. I don't intend to talk about those comments at all today, just we have very limited time. So, I want to focus on the things where we have issues to talk about.

In other cases we agree with portions of

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the comments and in a lot of cases it was mostly agreeing with the comment maybe just varying from what was proposed, you know, in terms of some of the wording. But generally agreeing with the approach.

What we expect to spend most of our time on today is talking about places where we really had some disagreement with what the comment was proposing.

After our discussions today, we'll make any appropriate revisions to the high priority sections and we'll reissue them.

And I mentioned as time permits, we'll also continue to work on the other sections.

I'm hoping we'll be able to review the high priority sections and get them out by April. There may be cases where if there's an issue that we just haven't been able to reach resolution on, it may take longer. But most of them, I would expect, would be out by then, hopefully, some of them sooner than that.

The way I plan to handle this meeting is for each major section, I'll try and summarize what the comments are. In some cases where there are a lot of comments, I'm going to try and group some

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things together and say here's generally what the issue was and then I'll explain where the staff is coming out on the issue and then I'll ask for feedback on those responses.

In some cases I think we may be able to reach a common understanding for how to go forward.

In other cases, we may not. And in those cases, if we see that we kind of reached a point where we understand each other's position, but there's just not going to be an agreement on it, we'll end the conversation at that point. There's no point in just keep going around and around on it. And we don't have a lot of time, so we need to keep moving along.

We hope to have some of the PNNL folks on the line at some point for some of the issues to help us answer some of the questions you may have as to our approach.

I do want to mention as Chet mentioned. We're not looking for new comments today. We're here to discuss the comments we received -- the comment period closed back in October.

If you do find you have new comments on the sections at some point, you're free to submit

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them of course and, you know, if there are ways we can work them in, we will. Otherwise, they may wait for the next time we revise a given section.

Chet will be keeping an eye on us and on the schedule and hopefully he'll be able to help us stay on track.

Are there any questions on the basic approach to the meeting at this point? Are we good with going that way? Okay.

In that case, what we want to do is start with probably the most challenging area. And what I'm going to do on the slides, I'm going to go back to the -- I don't have slides for individual sections, but I'm going to go back to the agenda and leave that up there so we kind of know where we are as we go along.

MR. POSLUSNY: Andy, one quick comment.

MR. KUGLER: Sure.

MR. POSLUSNY: It's assumed we'll have comments on the first section. We'll finish here, but <there> may be an opportunity for folks in the audience that were either part of the process or <not> --

MR. POSLUSNY: If you let me know if you

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want to add anything relative to the comment resolution, please let me know and you can step up here and get recorded.

MR. KUGLER: Okay. All right. Let's begin.

NEED FOR POWER. This was the area that had the most comments, almost a third of all the comments were in the area of Need for Power.

There are so many there's no way we can discuss them individually. So, what I'm going to propose is, I've kind of grouped them into three major themes. And so I'll explain what those themes are and then I'll explain our basic approach to responding to that and then we can talk about them.

The three basic areas that I saw in the comments - one was to what extent, by the way I'm hoping I don't lose my voice as we go along here. I'm obviously not doing too well on that.

To what extent and how we take into account reviews by state and other organizations of Need for Power. There were quite a few comments in that area.

The second area was the type and the depth of the information that had to be provided in

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relation to the Need for Power. And then how to take into account today's electric power industry regulatory environment? Now, there's not a clean separation between these issues. A lot of them kind of overlap with each other. But I'll deal with them as best I can in that way.

And there were a few comments that really didn't fit into any category, but they didn't tend to be the ones that were, I think, critical for our discussion.

I also want to mention though that some of these comments relate to issues that were the subject of an NEI Petition for Rulemaking back in 2001. There was a denial of that Petition for Rulemaking in 2003. The Commission's positions on those matters have not changed. So, where those are kind of aligned, you can pretty much guess what our answer will be in those areas.

Okay. So, the first area regarding reviews by states and others. The Environmental Standard Review Plan already recognizes that there may be independent reviews performed by other organizations. And it states that if those reviews are comprehensive and systematic, then we don't have

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to review them any further. We have to make a finding that they're comprehensive and systematic. So, we will look at what process they use. But if we conclude they've got a good process, then we can rely on their findings in our work.

We don't limit the source of the review but we also don't just simply accept, for instance, that if it's a state review by definition it's good.

We do in all cases look behind that review to see that it was systematic.

I also want to note that as I understand it, organizations such as Regional Transmissions Operators, they do separate analysis. Well, they do analysis of their own, but generally they do that analysis based on information they get from each of the power companies, the power generating companies.

So, it's not really an independent assessment. It's just them pulling together the information provided by other -- by the organizations such as the companies that want to build the nuclear power plants.

The key for me at this stage and the staff as we've looked at this is that in any Environmental Impact Statement, the staff is

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required to independently evaluate the impacts of the proposed action in general. And that includes determining the benefits of the action.

So, while we recognize that in many cases the state has to approve building the plant at some point, we still have a responsibility to look at the basis for that decision and determine that we accept the basis. We certainly cannot as some have suggested, default to a future decision by a state.

One of the things we've run into is we've talked to applicants and talked with the states. In many cases, their decision may come rather later. It really depends on the state and on the power company.

There's factors that come into play as to when they apply with the state for permission to build and when the state will complete its review.

But I know that at least in some of the cases where we've been talking to the applicants, it doesn't appear that any decision by the state is going to come during the time frame when we're performing our evaluation. It would come some time later.

At this point, therefore, we don't plan

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to change our basic approach requiring the applicant to provide the basis for the need for power.

If there is no independent review of that basis, then the staff will perform its own evaluation. If there is an independent evaluation, the staff will determine whether that evaluation meets our standards and if so, we can accept that result and we don't have to perform any further evaluation on our part.

So, that's basically where we come out in that area.

Are there comments or questions from industry on that?

MR. CUDWORTH: This is Jon Cudworth.

I think it's safe to say that there are comments.

I want to make sure that we are talking about what it is NRC has to do under NEPA. NEPA does not require you to evaluate Need for Power. NEPA requires you to evaluate benefits so as to balance them against costs.

There's a significant difference between those two concepts because if you are looking for a reasonable basis for NEPA to conclude that there

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will be a benefit as the applicant says, you do not necessarily have to have the results of a state evaluation determining whether there's a Need for Power.

If you have reviewed the state process, their regulations, their statutory authority, whatever guidance or other statements they have, perhaps a prior example, that can be a basis for determining that there is, in NEPA sense, a reasonable basis for concluding that there will be a benefit as you need to do.

In that regard you don't need to wait for the applicant to submit something to the state to get the state's answer. You don't have to be looking at what the state concluded with regard to Need for Power. You just -- in my opinion, you just need to be able to say that you have, on your own, independent of what the applicant said, looked at what the state does or the regional RTO or whomever, and concluded that their process meets your conclusions, your criteria being comprehensive -- there are four of them. I can't remember them all.

In that regard I don't see why you would say then you have to wait for the state's response or do you

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own evaluation if the state hasn't actually done the evaluation of the need for this particular plant.

MR. KUGLER: Let me ask a question this way.

Let's say the state evaluation will come later. We do our EIS. We look at their process. Say, well, they've got a good process. And say, okay. There's a benefit then. And then the state looks at it and says, now, this plant is not needed.

How does that make sense because we've said basically in our EIS that there is a benefit just because there's a good process. But the two don't go hand in hand.

MR. CUDWORTH: Well, actually, I think that would be very consistent because if the state says there isn't a benefit, that plant won't be built.

MR. KUGLER: Yes. But my Environmental Impact Statement said there would be a benefit based on just the fact that there's a process.

MR. CUDWORTH: Your evaluation, your EIS, would be saying that there's a basis for saying that there would be this benefit.

MR. KUGLER: No. There's a basis for

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saying that it won't be built unless there's a benefit, but that's two different things.

MR. CUDWORTH: Is it?

MR. KUGLER: I think it is. I think it is.

We're evaluating benefits versus costs, so we have to come to some conclusion about what the benefits are. Not just the conclusion that well it probably wouldn't be built unless there's a benefit.

MR. CUDWORTH: This, like you say may be an area where we have to agree to disagree. But you're taking a snapshot in NEPA space.

MR. KUGLER: Absolutely.

MR. CUDWORTH: The best information you have at the time you make a decision. And if at the decision point you say there is a process that's going to second guess the applicant's statement of benefit, that process meets the criteria laid out and systematic, comprehensive, etcetera, it's therefore reasonable for me to say that benefit would outweigh these costs and go forward and license.

If the state comes back later and says no, a lot of things could change between the time

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you say you're going to issue the license and the plant actually starts generating electricity. NEPA doesn't require to keep looking and keep asking. It requires you to make a decision based on the information in hand.

MR. KUGLER: And I understand that. And I'm not even discussing the case where things change. I'm saying, you know, if the judgment of the applicant erred or if the state has a different view, it's not that things have changed. But they just say no. There's not sufficient need for power.

Let me give you different type of example that I think is a little more concrete and people might understand better.

One of the issues we've also discussed is things related to the intake structure and, you know, we've taken the position we need to be able to state what the impacts to the aquatic biota are going to be from the intake structure.

Now, we don't regulate that, the state would. And the state will have to issue permits for the intake structure and they will do their review and they will determine what the impacts are in their view in the end. But NEPA doesn't say you

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don't have to look at the impacts for the Federal action if somebody else is going to look at it at some point. We're bound to reveal what the impacts of the proposed action are going to be. And in the case we're talking here about benefits.

Benefits is a little hard to talk about, I think. That's why I wanted to go to a little more concrete example. But we could not for the intake structure say, well, we don't know what the impacts to aquatic biota are going to be. But we really don't need to say because we've looked at the state's NPDES process and it's a good process and they won't let them run it if it creates a problem in their mind.

And I think -- I think people would agree we can't do that. At least I hope people would agree with that.

MR. CUDWORTH: I would agree to that.

MR. KUGLER: Okay. I think it's a parallel type of situation. And I guess that's where I see it. I understand what you're saying that, you know, in the long run, assuming the state has an absolute say and I'm not sure that's true in all cases. But assuming the state makes the call

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eventually whether to allow the plant to be built, there is some assurance that it won't be built if it's not needed. But we have to make the call in the Environmental Impact Statement whether there is a sufficient benefit to offset the cost at the time we make our decision.

MR. CUDWORTH: Well, let me ask.

MR. KUGLER: Has somebody just joined us on the bridge?

MR. WARWICK: yes. Mike Warwick.

MR. KUGLER: Okay, Mike. Hang on. I think we're getting feedback.

MR. WARWICK: Am I still there?

MR. KUGLER: Yes. Okay. You're there. We were getting feedback for a minute.

MR. WARWICK: I noticed that.

MR. KUGLER: Oh, we are again.

In between the times you spoke, did you do something different? Were you putting your phone on mute or anything?

MR. WARWICK: No. No.

MR. KUGLER: Okay. For some reason we've gotten feedback a couple of times.

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MR. WARWICK: I noticed that. I'm not hearing it now.

MR. KUGLER: It seems to have come and gone.

We were just actually coming towards the end of a discussion on one of the key issues in Need for Power, the issue of whether or not we should be looking behind the decisions of others or whether or not if the state has a good process, even if it hasn't been carried out yet, we should be able to indicate in the EIS that there would be a benefit.

We've been talking primarily with John Cudworth from Tetrattech. He was one of the principal commenters in this area as you're aware.

Of course, we're coming close -- I'm sorry. The person who joined us is Mike Warwick. He's from Pacific Northwest National Labs. And he was the principal author of the revisions for the Chapter 8 ESRPs.

Of course, we were coming close to the end of our discussion. I don't know how much more we want to talk to that one.

MR. CUDWORTH: Andy, if you did whatever analysis you felt you needed to do and then like

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your scenario weighs out, later the state looks at it and says now we don't need that power. How is that different?

MR. KUGLER: The difference is we satisfied our NEPA responsibility to evaluate the benefits versus the cost. That's the only real difference. You're right. It could still happen but they have a different viewpoint than we do. And they do get a call later than we do.

MR. CUDWORTH: Would you say then your analysis was wrong?

MR. KUGLER: I would probably want to go back and understand why they ended up at a different place than we did.

I will say one of the things I've seen in almost every area that we look at, there's a certain amount of judgment involved. And when judgment is involved, people can reach different endpoints. But generally speaking, I would hope we'd come to the same point. But it could happen that they come to a different conclusion and I would at that point go back and look at why. But I've still discharged my responsibility under NEPA to reveal our determination what we think the benefits

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and the impacts are and weigh that in my Environmental Impact Statement.

MR. CUDWORTH: I don't know if anybody else has any comments.

MS. CERAFICI: This is Tamar Cerafic. This may go to -- this may go to the type and depth of information. It may be a great bridge for you, Andy.

But one of the things that Chapter 8 allows an applicant and a reviewer to account for is the four things that John mentioned. That is that the program is systematic, it's comprehensive, subject to confirmation and responsive to forecasting certainties or uncertainties, I should say.

With that in mind an applicant could look to, for example the most recent state utility commission, if it's a regulated state, discussion of its own opinions of whether power is going to be needed.

For example, North Carolina in its 2007 report to the legislature as well as in its 2007 utility commission order adopting the integrated resource plans of the various utilities, actually

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said you have a need for base load. It needs to be, you know, it's going to have to be coal or nuclear because the price of natural gas is too volatile to assess it for our rate-payers. But we need new base load energy.

If we were to be able to have that kind of detail and that kind of review, I would think that it would satisfy at least the NRC's concern that they have looked at that benefit. They can then look at what the state looked at. They can look at the programs that the state has in place and evaluate that.

There are portions I think that are still in Chapter 8 that allow an applicant, for example, or a reviewer for example, to rely on a statement made by a power planning commissions such a PUC to -- that there is definitely a need for power in that state and that there is a clear basis in the record for that.

And I think that that is an appropriate information pool from which to draw when one is looking at a need for power in the terms of NEPA and in the terms of a benefit context.

Now, what I understand you to say is

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that that information is something that we will review. We will look at it for the record and determine whether it's enough for us to be able to say, from a socioeconomic standpoint and all of these other standards that we're looking at to develop a benefit analysis, this is what we can use.

We can use that record. And that, I think, is what the industry is looking for. At least, those of us who represent applicants are looking for is that that kind of specificity in what you need from us as far as the information is concerned.

MR. KUGLER: So, in other words, I want to make sure I understand the question.

Are you asking, in a situation where there is a state review that occurs in time be included in the application, what differences in the information are that you need to supply exist, compared to a situation where there is no such independent review beforehand. Is that what you're asking?

MS. CERAFICI: Essentially correct.

In an integrated resource plan state, the integrated resource plans are submitted by the utilities to the PUC. There is an extensive review

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process where that -- where information is taken where the calculations are reviewed and revised and revisited. And there's actually a hearing with sworn testimony taken. And from that record, the need for power or what needs to be in the next year's integrated resource plan is described and defined by the commission, not by a public staff or by a utility, but by the authorized legislative body to look at that.

And I think there needs to be more credit for that given in Chapter 8 than there is. If not in that kind of a context, certainly some sort of definition for the -- for the applicants and the reviewers for that matter as to what this "shortcut" means. Systematic comprehensive, subject to confirmation, responsive to uncertainty. And then we don't have to go any further.

MR. KUGLER: Well, I think -- I've been doing a fair bit of pre-app and have been to different states.

MS. CERAFICI: Right.

MR. KUGLER: Different utilities. So far of the places I've been, the situation with North Carolina is relatively unique. They do appear

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to be out ahead of the other states in terms of being very proactive on need for power, reviewing the integrated resource plans in a public domain and documenting that.

A lot of the other states that I've been to don't do things like that and I saw you talking to April. South Carolina is one of them. They apparently are not going to make any call regarding the need for power until the applicant asks for permission to build.

So, the situations do vary and one of the things -- one of real challenges for Chapter 8, I think, is trying to write it to be really flexible. And one of the things, I was going to talk about it later, but I can mention it now instead.

One of the suggestions was to restructure it to have different paths for different situations. And I think that's a suggestion we want to take a hard look at and consider. Now, the only problem with it, it would be a really major rewrite and it might take too long to be of use to the near-term applicants. And so what we might end up doing is making the other technical changes in the near

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term and then work toward restructuring further down the road. You know, start working on it, but it may take some time.

However, one of the other challenges we face and April Rice is quite familiar with this one is even for one given plant the situation is not so clear. For the V.C. Summer site, you've got a utility, you've got a state-run organization and you've got a rural utility and they're all different. And how they get their funding, how they get their need for power evaluated, if they get it evaluated at all by anybody else, varies among those owners.

Now, maybe it's not as bad as it sounds in that as long as one of them gets a review and it covers the entire plant, that would be fine probably. If on the other hand, you know, a given owner only gets their piece of the plant reviewed, I'm not sure how we handle that.

It gets very complicated. And I think one of the things we're trying to do in this section is maintain a lot of flexibility because the situations we're going to run into as we do these reviews are going to be all over the map.

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But I think the basis concept, yes. That if you have a situation like North Carolina, I think they're going to be pretty easy in terms of going through the need for power evaluation with us because they're out ahead.

MS. CERAFICI: Yes. And I appreciate that you've committed to be flexible on Chapter 8. Because as I have reviewed the current iteration of the draft, there are calculations. There are things, you know, here is our checklist. And that checklist does not necessarily reflect what the utilities are doing now to plan for power.

They may not be using a high percentile. They may be using a computer program that was developed three years ago long after the former iteration of NUREG-1555 was developed.

As a result, that flexibility is absolutely essential, particularly for an applicant who is -- you know, who may be in a deregulated marketplace and who may want to rely on the utility projections for that marketplace rather than what a state might be saying.

So, we need to have a little flexibility and specifically I'm talking about what's going on

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in 8.2 and 8.3 in developing that need for power because I don't think that a lot of the utilities will be using what is in the need for power sections of those specific sections anymore.

MR. KUGLER: Okay. And I think I understand that. There were some comments, I think, in that regard. And this does get into the data and information needs.

This is guidance, but even so -- and so in other words, the reviewers don't have to do it exactly the way it's written if there is some alternative that the applicant used and we find that to be okay, that that's fine. But still if we don't think that there is one dominant way it's being done, then probably the guidance should be written to not indicate there's one way that's best.

MS. CERAFICI: Right.

MR. KUGLER: And I think that's probably what you're getting at.

MS. CERAFICI: That's where I'm going with that is that there are a number of different ways now available to utilities to identify and develop their need for power.

Some deregulated utilities will even be

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required to use software that their RTO is providing in order to develop that need for power so that the markets can be adequately forecast.

MR. KUGLER: And one of the things I think that -- I think I saw this in the comments or I read it. Maybe I interpreted it into one of the comments was that we shouldn't be -- let's say just a random example.

Let's say a utility using their approach to need for power, they come up with a 30/60/90 percentile numbers and the guidance says 25/50/75. Well, as long as there's, you know, a reasonable basis behind the way they did it and it still provides the right kinds of information, we shouldn't be requiring an applicant to go back and redo calculations for the other percentiles just to satisfy that. And I think that's perfectly reasonable and maybe there's ways we can work that specifically into the guidance to make that clear.

Mike, you've been listening in on the conversation.

What do you think about that?

MR. WARWICK: No. I am tracking that they're saying. I agree with that.

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I wonder if I should try calling in again.

But, no. I'm agreeing with what -- said.

MR. KUGLER: Okay.

MR. WARWICK: We tried to write this so that it would be descriptive of what we're expecting. But tried to keep the flexibility in there and the interpretation seems to be we're trying to be prescriptive and that's not the case. I think we're trying to, you know, with the example of 25 percent -- 25 percentile not supposed to be and you have to keep those but it suggests that you need to do a range that looks like that.

But it's not coming across that way and that's where changes are needed for sure.

MR. KUGLER: Okay. All right. So, I think we understand.

MS. CERAFICI: Yes. For example, that range that Mike mentioned could be used as a, you know, as an example.

For example, we need to have this range. Other utilities or other industry practices may have a different range of percentiles.

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MR. WARWICK: I've got no problem with that.

MS. CERAFICI: Yes. And at least give us something that shows that you have a system for developing your need for power and your reports and whatever else you need. That's really all I think we need as we prepare these applications.

MR. KUGLER: And I think we agree with that. I don't think we have any problem with that. And so we'll have to take a look and see if there's a way we can make it clearer that where it does give relatively specific things like those numbers, it's meant as an example of one approach, but there could be a range of approaches that would be fine.

Okay.

MS. CERAFICI: Thank you, Andy.

MR. KUGLER: Okay.

MR. MAHER: This is Bill Maher. I'd like to ask a question and it's basically going back to your example, sort of run it.

You were talking about your review of the state process being systematic and independent, but you wouldn't go before their decision.

Suppose an applicant, in other words,

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before the PSC decision, Public Service Commission decision. In other words, you wouldn't make a determination of a need for power prior -- prior to a state organization coming to a need for power because there could be a possibility of a difference of opinion between the Federal agency and the state agency.

MR. KUGLER: I don't think I said it -- or at least that was not my intent.

What I was saying is, we are going to have to make -- in our Environmental Impact Statement, we have to make a call on the cost-benefit weighing. And obviously one of the major benefits of the nuclear power plant is the electricity generation, so there's got to be some need for that power. And we're going to have to -- and in a lot of cases we will be making that call before the state makes its call on whether the plant is needed or not. And that's where John was saying that there could be a situation where we come to one conclusion and they come to another one. It can happen.

I mean, for us it would be ideal if the state was always out ahead of us.

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MR. MAHER: Well, that's really my question. What would you expect an applicant to submit under need for power if the PSC has already ruled that there is a benefit for the unit prior to let's say the environment report even being submitted?

MR. KUGLER: Okay. And that might be the case, for instance, with North Carolina.

I'm trying to remember exactly how that part is structured. And, Mike, you might be in a better position to answer this.

In the situation where let's say a state has made a call on the need for power for this area, for this power company for instance, and indicated new power is needed and may have specified the types of likely power sources like nuclear or coal. What information does the applicant provide in its submittal in relation to that?

MR. WARWICK: I think the intent in providing because basically that record. Here's what they found. It supports our request and pretty much be it.

Now, it clearly is getting -- because of the one example of the range of cases which is

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where, you know, I came up with the notion that John's suggestion of trying to have standards that are responsive to specific examples, that being one of the specific examples. And the other extreme being a merchant which is not subject to state review, you know, another example. Then a rewrite that frames the requirements in that context might be a lot easier for everybody to follow.

But certainly my intent was in the case where you just outlined. That would be a slam dunk. You just submit the record and there you go.

MR. KUGLER: Well, when you say, submit the record, I want to make sure we're fairly clear on this.

One of the things we talked about is that we have to be comfortable that the state carried out a systematic comprehensive process as well. How do we make that call? What information do we need to get to achieve that?

MR. WARWICK: Well, what I thought I was trying to get out when I wrote was that they would either provide whatever the state's characterization of the process is so we could look at it and see that it met those standards. Or they would write it

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themselves saying, you know, these were the tools that we used. This was the process we used. The data we used in the form of the state process. And then we'd make a judgment on whether it did meet the, you know, the comprehensive, independent, systematic test or not.

The thing that does come to mind is we probably need to define what our standards for those are going to be up front which we haven't really done. We just asserted that they needed to be and gave kind of round-about examples of what might fit in that.

I think this is where a lot of the confusion is coming from, you know, looking at forecasts and certainly using -- say, well, let's look at some ranges. It could be -- is 25 percentile, 75 percentile, so on and so forth. I think the people reading it are now saying well, that's prescriptive. We need to do it that way. If the state doesn't do it that way, then we're not going to be compliant and that clearly is not the intent.

So, we need to, I think, probably articulate better what considering range of forecast

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can certainly mean in terms of the standard that may use an example like different percentile that doesn't say that these are prescriptive. It indicates that other tests are acceptable.

MR. KUGLER: Okay. All right.

Does that help? Okay. All right.

I want to see if I have anything else under the data and information needs I wanted to specifically mention. We kind of already talked some of it.

Well, one of the issues that comes up and Mike alluded to it is that the information for say a typical old style regulated utility versus a true merchant plant may be rather different. And what information is available may be different.

I think again we try to find ways to speak to that in the ESRP sections. The problem again is the range of variability is so great that it's hard to say, here's the answer for a merchant plant because it's probably not going to be one answer.

So, I think what we said was that particularly for a merchant plant, some of the information we would typically expect to have may or

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may not be available. And we have to work with the information that can be provided.

But I think also -- and the reality is that and obviously industry has said this before. A company is not going to build a plant unless they've decided it's going to be worthwhile, that they're going to make money on it, that they're going to be able to sell the power.

Well, they didn't just come up with that idea. They did a lot of analysis to get there, I hope. So, what we're really saying is, give us that basis. You guys have reached this conclusion. There's got to be some basis behind it. We need to understand that basis.

I think one of the challenges we may face particularly for merchant plants may be the issue of proprietary information. You know, we do have processes in place to deal with proprietary. I'm not sure everybody is comfortable with it for something like that because it can have a very, you know, if the information is made public, it can have an enormous effect on the company obviously. And we don't want that situation, and obviously we need to find way to deal with that.

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And maybe as a separate issue we can talk about it at some other point is if there are concerns with how proprietary information of this nature would be handled and protected, maybe we should talk about that.

And the process is there. It supposedly is set up to deal with things like this. But I know from talking to applicants there is enormous trepidation about ever providing that kind of information.

So, that may be a separate discussion that we need to have. If there are holes in the proprietary process, it may need to be addressed. Obviously, I can't do that. If the rules need to be changed, that would be sort of a separate issue that we need to discuss. But I know that that's out there.

Did you folks want to comment on that aspect?

MR. MAHER: I just know from previous employers, let's put it that way that even -- even once the proprietary process was explained to them, those numbers are not leaving the company.

MR. KUGLER: Okay. Okay.

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MR. MAHER: The next question then is in your -- in the NEPA process even if it was submitted on a proprietary and environmental report, what sort of public involvement gets involved in that as -- from a disclosure standpoint? Meaning environmental report public disclosure?

MR. KUGLER: Well, I mean, you know, if it's proprietary information and we conclude that the appropriate basis was provided then it's withheld in accordance with the regulations 2.390. But I'm trying to recall. I think there are -- there are caveats on that and I'm sure that's what makes people nervous. So, maybe those are the sort of things that we need to talk about. You know, how can a company feel certain that information that if released would cause extreme damage to them, won't be made public.

I understand that concern. So, okay.

MR. WARWICK: I just -- I agree with the question. I'm struggling to figure out what that information might be in context. Obviously going public with a proposal to build a plant so we know they're building a plant. We know the size. We know the location. We've asked for in Section 8 a

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description of the market area they expect to sell the power in to.

What -- what is proprietary that's going to go beyond that?

MR. MAHER: This is Bill Maher again. This is Bill Maher again.

The one -- just to give you a number, it's a company's projected price that they expect to sell the power for. I'll just give you one.

MR. WARWICK: Okay. And we did ask for that so I understand. Okay.

MR. KUGLER: Okay. Okay.

MS. CERAFICI: Well, this Tamar.

Along with Bill's comment, a lot of the procedures for developing the numbers, the price for power, how it's going to sell, who are your going to wheel it to, who your customers are. There is a number of -- there are a number of issues that really cannot leave the doors of the company and shouldn't in developing the need for power question.

And so some flexibility, Mike, built into any section of the said Chapter 8 would be very helpful in that regard.

MR. WARWICK: Okay. I think so for me

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to understand that so we're saying probably not going to get your contract sale price for or the name of a prospective buyer necessarily of this. But we could probably get information -- well, certainly you can have some kind of attestations that you can be competitive against whatever the -- your competitor's power prices are so we could probably get that from you?

MS. CERAFICI: Maybe not even that,
Mike.

MR. WARWICK: Okay.

MS. CERAFICI: It's that competitive.

Perhaps what could happen is we could go off line and perhaps discuss this. And maybe -- maybe discuss some scenarios under which the information as far as need for power.

I have down in my notes while you were talking, Andy is building a business case for it, a broader business case perhaps without the specific numbers. But at least with the kind of information that a company person would be willing to attest to when they submit the application.

We can go off line with this, Mike.

MR. KUGLER: Yes. I think this is a subject that we probably do need to talk about

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further, probably in a separate meeting. But I think we understand the concern in general. We may have to get into some of the details.

MR. WARWICK: And I like the direction you're going with that.

MR. KUGLER: Okay. The last area kind of relates to this and that is the area of the new regulatory environment for the electric power industry.

We've talked a bit about this already, the fact that each plant is going to be a unique situation and so we need to maintain flexibility. So, our current plan is to maintain or retain the aspects of the guidance that give us that flexibility. But we will look at ways to try and make it clearer how the guidance applies to different types of situations because right now it doesn't do that. So, I think that's something that would help both the applicants and the staff as we go through these reviews.

That's all I really planned to cover under Need for Power. Were there other aspects that industry wanted to talk about from the comments? I mean, I tried to cover everything kind of broadly

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but any from the public?

Okay. Hearing none -- I'm sorry.

MR. BELL: Just a second.

MR. KUGLER: Okay.

MR. BELL: We encourage you to consider that it's not one size fits all, maybe it never was, but certainly never will be.

Again, you mentioned that some things you might be able to -- some flexibility you might be able to build in readily and others might take more time. I would just say and even though you may not be able to help those going through the process right now, it should not deter you from starting on those longer term things and we'd be very happy to continue to work with you on those --

MR. KUGLER: Okay.

MR. BELL: -- kinds of things.

MR. KUGLER: Well, I understand and I wasn't implying we weren't going to work on it, just that it might take longer to get there.

Was there somebody in the back who wanted to -- no. Okay.

All right. The next area I want to talk about was Transmission Lines.

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I'll start off by saying if you got to see what we provided yesterday on the areas where we agreed, one of the big areas was alternatives and with the new rule in place for limited work authorizations rule. It was called Limited Work Authorization Rule, but it's really now the rule that sets out what things are not within the proposed action, but are considered cumulative impacts.

Based on that, we -- we do agree. We plan to delete the section 9.4.3 which is on Transmission Line Alternatives. And that includes both alternatives for the routing and alternative designs of the actual equipment.

So, that's pretty well taken care of. I think we're all in agreement on that.

There were a number of comments related to concerns with the types and availability of information on routing and the associated impacts. I wanted to briefly explain why we feel we still need to speak to those impacts in our Environmental Impact Statement.

The transmission lines are directly related to the power plant. In other words, you

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need the transmission lines if you're going to build a plant to get the power out. And the reason you're building the lines is to support a power plant. So, they're inter-dependent.

But we do recognize that in today's environment in most cases, the applicant isn't the one who decides where the lines are going to go and doesn't build them and doesn't operate them.

So, I think what we have come to peace with is we can accept -- I've heard different terms used. I think the term I like at this point is a representative route. I wouldn't even say "most probable", which is what has sometimes been used. I would just say representative. This is -- you know, we pretty much know we want to tie in off to the west and this is where it's starting from and so a likely route would go somewhere through here.

Something that would allow some reasonable representation then of what the impacts of such a line would be. So, in other words, you know, we don't want to evaluate the impacts based on a ten-mile line when most likely you're talking about 150 miles of line. But we're not going to know exactly where it's going to go.

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So, in this way, what we're asking the applicants to do is give us an idea of what the probable impacts would be, give us some information on the sorts of approaches that are taken in siting the line to minimize and avoid impacts. And in that case you may be able -- you now, if you take the case of a merchant plant, you might not be able to really talk to the transmission line operator, but you might be able to talk to the state or talk about the state's process because generally the states are involved in the siting of the lines as well.

But just give -- you know, if we can get some information it will help us to put together a reasonable idea what the impacts are likely to be, that's what we would aim to do.

One of the other things that changes is in the past and even for the Vogtle Early Site Permit, we included the transmission line in our biological assessment for our consultation with the services -- Fish and Wildlife and Marine Fishery Service, based on the new rule clearly indicating this is outside of our regulatory authority.

We wouldn't intend to include that evaluation in our biological assessment and in our

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consultation. Any consultation would be carried out by whoever authorizes building the lines.

We're not authorizing the lines. We're just revealing the impacts because they are related to what we are authorizing. Okay.

There are also a number of specific recommendations on changes to data and information needs and for the most part we agreed with those. There were a few minor exceptions where I think we deviate from what was proposed, but we felt like most of those changes were pretty good.

So, based on that general discussion of the direction we're heading, what do folks think about that? Are there any concerns or comments with that?

MS. RICE: This is April Rice.

Just to clarify, this is for traditionally regulated as well as the merchant plants approach?

MR. KUGLER: That's correct. Yes.

MS. RICE: So, the expectation would be the same?

And looking at the impacts, you know,

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the county approach versus the macro-corridor approach, the county approach then would be appropriate describing the controls that you have over avoiding --

MR. KUGLER: I would probably hope you could do better than just counties.

MS. RICE: Okay.

MR. KUGLER: But I recognize that --

MS. RICE: Something in between, the --

MR. KUGLER: Yes. I mean,

MS. RICE: -- the macro-corridor and --

MR. KUGLER: Well, the idea of the macro-corridor, that's, you know, a term that may not be well defined.

If you lay out, you know, generally a swath, the thing is that some counties are pretty big and when you start saying it will be somewhere in there, it makes it a little harder.

Of course, you know, we have to work through some of these things. We haven't done it this way before, so there's some aspects of it that might be difficult to -- what's the term? To anticipate how things are going to play out.

I mean, in theory, the county approach

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could work because you're going to tell us the basic process.

MS. RICE: Right.

MR. KUGLER: How you're going to avoid things. So, even if there are endangered species, cultural resources, critical habitat in those counties, your process descriptions should tell us how you would avoid affecting or mitigate any impacts.

MS. RICE: And it would be similar for the macro-corridor really.

MR. KUGLER: Well, it would be.

I think the reason I would learn towards a macro-corridor to be honest is I think people then, including the public, as they review what we're doing, they look at that and say, okay, somewhere along here as opposed to say, it will pass through these counties. They're like, well, they don't know what they're doing.

And the truth is, you know, you don't know what's going to happen with the transmission line. That's true. But I guess I'm worried about the perception that nobody really has any idea what's happening here and yet they're saying they

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know what the impacts are going to be.

So, I think in that regard the macro-corridor approach at least appears to look more like we have some idea of what's going to happen. And sometimes the optics make some difference in the way things turn out.

So, I think those are my thoughts on that. I guess what I'm saying is that we can look at the idea of the counties versus the macro-corridors and see if we can live with both or either.

MS. RICE: How should we explore that further then? Would that be something talk about? Or something you need to think about and maybe get back to us?

MR. KUGLER: Yes. I think the thing would be for us to think about it and get back, you know, and publish something on that.

You know, probably I guess I would say if we come to peace with the idea of using a county-wide approach, we probably don't need to talk anymore about it because you all will be content with that.

If we don't feel we can come to peace

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with it, then we probably would need to talk further.

MS. RICE: Well, and to explain what's an adequate macro-corridor then, you know, is it 50 miles or -- I know you can't give us a number, but kind of quantify what's acceptable there.

MR. KUGLER: Okay.

MR. BELL: So, is that an action for the NRC?

MR. KUGLER: Yes.

MR. BELL: Chet certainly wrote it down so I --

MR. KUGLER: Darn it. That makes it so.

MR. BELL: These are not assignments necessarily.

MR. KUGLER: He's helping me make sure I keep track of issues that do need some follow up one way or the other. Okay.

MR. CUDWORTH: John Cudworth. John Cudworth.

I just wanted to make sure that I understood what you said was the consultations for the plants will no longer cover the transmission lines. Is that right?

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MR. KUGLER: Correct.

MR. CUDWORTH: Okay.

MR. KUGLER: Because they're not part of our action.

MR. CUDWORTH: Understand.

All right. I looked around, I didn't see Jennifer Davis so I may be taking advantage of you if I use culture resources as an example, but obviously a plant could have cultural resource impacts. There could be something on site and 50 miles away a T-line might go through another site. Do you call that a cumulative impact? I'm not sure how I would call that a cumulative impact,

MR. KUGLER: Well, it's a cumulative in that it -- I think I see what you're saying. You're saying, in other words, it's affecting a different resource?

MR. CUDWORTH: Okay. Yes. Completely.

MR. KUGLER: All I can tell you is that is how the rule is written.

MR. CUDWORTH: The rule is written that you have to address cumulative impacts,

MR. KUGLER: No. The rule is written, it says -- now I'm talking about the rule that

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changed the LWA requirements.

MR. CUDWORTH: The LWA. Okay.

MR. KUGLER: It says you must tell us the impacts of these other activities and address them as cumulative. I think that's how it's written. And I don't know, Jim, do you have

MR. CUDWORTH: You may be right. I just don't know.

MR. BIGGINS: Do you want to read the rule?

MR. KUGLER: You have it right there?

It would be 50.10, I believe. I think that's where that got put.

MR. BIGGINS: Yes, I think so.

MR. HENDRICKSON: 51.45(c)

MR. KUGLER: Well, actually I think 50.10 is where it says this, and then 51.45 talks -- well, it's one or the other. We'll let Jim find it.

MR. BIGGINS: Well, 50.10 has the definition for construction.

MR. KUGLER: I think Paul may be right. 51.45(c) is where it actually says how you then address it.

MR. BIGGINS: In 51.45(c), Analysis.

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The environmental report must include an analysis that considers and balances the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action and alternatives available for reducing or avoiding adverse environmental effects. An environmental report prepared at the early site permit stage under 51.50(b) construction permit stage, under 51.50(a) or combined license stage under 51.50(c) must include a description of impacts of the preconstruction activities performed by the applicant, i.e., those activities listed in paragraph (b)(1) through (b)(8) in the definition of construction contained in 51.4 necessary to support the construction and operation of the facility which is the subject of the limited work authorization, construction permit, or combined license application.

The environmental report must also contain an analysis of the cumulative impacts of the activities to be authorized by the limited work authorization, construction permit, or combined license in light of the preconstruction impacts described in the environmental report, except for an

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environmental report prepared at the early site permit stage or an environmental report prepared at the license renewal stage under 51.53(c).

The analyses and the environmental report should also include consideration of the economic, technical and other benefits and costs of the proposed action and its alternatives.

MR. KUGLER: I think --

MR. BIGGINS: We can stop there.

MR. KUGLER: Yes. I think we've got what we need there.

So I think for preconstruction, you have to provide the impacts of those other activities. And then it tells you where to place it or to put it in the context of cumulative after you've done that. But you do have to describe them.

MR. CUDWORTH: Didn't it say you have to describe the activities, not the impacts?

MR. KUGLER: Description of the impacts of preconstruction activities.

MR. CUDWORTH: Okay. I can read the reg later, too.

MR. KUGLER: Okay. Okay. But that was my understanding of it. And if there are questions,

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we can try and get those resolved. But I think that's the way the text was written.

MR. MAHER: Again, this is Bill Maher.

But suppose there is a state process for determining siting of transmission lines. And that state process has gone through and been -- gone through its process to some sort of termination. How would you expect that to be handled in the environmental report?

MR. KUGLER: Well, what we're saying is all you have to tell us is generally where you expect the lines to run and based on that what the impacts would be.

If you've already gotten through a process and you know the route and you know the impacts, that's great if you can tell us that. That's wonderful. I'm just saying it's not required.

And, again, my understanding having talked to a lot of the applicants, the timing issue is going to be such that it will be unlikely I would say at the time of application that that information would be available. And that's been the challenge. That in most cases people are just not ready to talk

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really routes at the time of application.

MR. MAHER: But if it's there?

MR. KUGLER: If it's there, I think probably the best thing to do is just provide the actual information. That's what I would recommend.

I couldn't see going to, say, a macro-route or a county-wide approach if the information is already available.

MR. CUDWORTH: Andy. And this Jon Cudworth again. I need to go back to the archeology.

Does that mean that there will not be any National Historic Preservation Act consultation for T-lines?

MR. KUGLER: That would be correct. Not by us.

MR. CUDWORTH: By you?

MR. KUGLER: Not by the NRC.

MR. CUDWORTH: Okay.

MR. KUGLER: Because we're not authorizing that.

MR. CUDWORTH: And I'll ask another maybe obvious question. Coastal zone impacts will not be covered then also?

MR. KUGLER: Well, if it's a transmission lines you mean?

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MR. CUDWORTH: Correct. That the --

MR. KUGLER: That would be correct. But if, obviously, if the plant is within the coastal zone, it would come into play.

MR. CUDWORTH: All right.

MR. KUGLER: Okay.

MR. BIGGINS: Andy, I do want to correct language you used earlier. You said they're interdependent, the impacts from the transmission lines. And I think that's the wrong way to describe them. I think rather than get us tied up in a legal argument here, but it's they wouldn't be built "but for" the building of the plant. And that's the way we look at it.

MR. KUGLER: Okay.

MR. MAHER: I think the correct term is connected action.

MR. KUGLER: I will neither confirm nor deny that. Okay.

That was really all I had to cover on transmission lines. Were there other issues that anybody needed to speak to regarding the comments?

MR. POSLUSNY: Anybody from the audience?

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MR. KUGLER: Okay. We may actually be on schedule with everything. Actually, we're ahead of schedule. That's good.

Okay. The next area I wanted to cover was the site selection process.

There actually weren't that many comments directly in this area. There were a couple -- there was actually one related to site selection directly that we found acceptable, that was fine. There was more related to -- it may have been alternative energy that we also were okay with the comment.

There was one comment, actually it was comments made by three different sources that I do want to speak about. And this was a comment regarding a special process for a proposed site that is an existing site owned by the company that's applying.

Before I go into my discussion of it, I want to make a couple of comments or provide some information that I want to make sure people are looking at.

On November 20, 2007, the Commission issued its decision on the North Ana early site

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permit. That's CLI 07-27. I'd strongly urge anybody with an interest in new reactors to read that decision and become familiar with the Commission's expectations for future reviews related to site selection and some other issues that they discussed. I think that's a very important document to take a look at. But they did specifically speak to site selection because that was a big issue in that early site permit.

Likewise, I'd urge folks to take a look at the Board's initial decision, and in particular the dissenting opinion in the initial decision. That was issued on June 29th, 2007. There's a very good discussion in there of some aspects of the site selection process. And I think we all need to make sure we're at least paying attention to it, whether or not you fully agree with everything. There's certainly issues that need to be considered.

So I just wanted to mention that because I think folks need to be aware of those and have looked at them if they're working in this area.

Moving on to the comment, what essentially the comment said was that if an applicant chooses one of their existing sites, they

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really shouldn't have to do a kind of a top down review looking for other sites. In other words, starting with a region of interest working down to candidate areas, potential sites, candidate site and then to alternative sites. They shouldn't have to go through all of that because they've already selected a site that they own.

I've got to tell you that the staff absolutely disagrees with that viewpoint. I mean, this is one where there's really no gray. That is not an acceptable approach to the staff. Let me explain a little bit about what I mean.

The ESRP already says an applicant may choose the proposed site based on a nonsystematic process. So in other words, the applicant may choose as its proposed site a site that it owns and wants to build a new nuclear plant. And that's okay.

But it goes on to say that for the alternative sites, they have to have been selected and developed through a systematic process and that those then need to be compared to the proposed site.

The important point here is that the guidance on the nonsystematic approach only applies to the proposed site. What happens after you submit

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your application is this: The guidance tells the staff, take a look at the process that the applicant used. What was their process for selecting the region of interest? How did they get from there down to candidate areas, potential sites, alternative sites? And then having looked at the process, the staff does an independent comparison of the alternative and the proposed sites. And we do it in two steps.

We actually do something a little different than what industry typically does. And that's okay. It's how it's set up for us.

We first try and determine if there's an environmentally preferable alternative site. And if there's none, we're done. The proposed site wins.

If there are environmentally preferable alternative sites, then we go on to the next step, which is looking to determine if any are obviously superior. And in the obviously superior test we bring in -- let me back up for a moment.

When we're looking for environmentally preferable, we're looking purely at environmental factors. We don't care if you own it. We don't care if there's transmission lines, other than impacts of

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transmission line building. We're just looking at environmental factors.

When we move on to the obviously superior test, then we're going to look at other factors like institutional factors. Hey, if you own the site, you've already got security there, you've already got an emergency plan there, the site's partially cleared; there are a lot of other factors that come into play. Then we look from preferable to obviously superior.

Generally speaking the industry basically does this all in one step, because they consider all the business related aspects at the same time as the environmental. It's all done in one step. But the point is that there has to be process that does look, and it has to be systematic. And if you look at the dissenting opinion in the Board decision and if you look at the Commission's decision, you'll see that they both emphasize that that is what is expected.

So having said that, I'd be happy to hear what you all -- well, I think Jim wants to say something.

MR. BIGGINS: I would comment.

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The dissent in the Board decision has some very pointed criticism and I think is very useful in enlightening the process. But you have to keep in mind the Commission did overturn or disagree with the dissent in their opinion.

MR. KUGLER: Right.

MR. BIGGINS: I mean, I would keep that in my mind in reviewing the dissent. But I think it does serve a purpose to review both.

MR. KUGLER: No, I agree. And that was my intent. The Commission decision is what really matters. The dissenting opinion, though, does provide some insights, some things to think about.

Okay.

MR. CLAYTON: I would like to mention that in our pre-application visits to sites and some of the applications we've received so far that's one area that's been kind of problematic for us to review. So anybody that has any additional comments on how we can better clarify what's needed, please don't hesitate to send them in.

MR. KUGLER: Okay.

MR. POSLUSNY: There's somebody in the back that wants to say something. Could you come up

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to a mic so we can hear you? And please identify yourself when you speak.

MS. DUBINSKY: Thank you. I'm Melissa Dubinsky. And I'd like to ask a clarifying question.

In this analysis of the alternative sites can the applicant then once it has determined that it's preferred site is owned by an existing plant and then has gone through this independent process to come up with alternative sites, can it then compare the alternative sites with the candidate site only on the environmental factors? And if it does not determine an environmentally -- no significant differences among them, can it stop at that point and therefore not go into the socioeconomic factors or the institutional factors, or you have some of those other things that are not strictly environmental and thereby follow the process that you're describing that you do as well?

MR. KUGLER: I don't think the way it's written it says one way or the other. And I think part of the reason is I think there's a recognition that the industry typically builds the business side of it into their analysis from the outset.

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What I would -- this is off the top of my head. I have to be honest. I hadn't thought about it this way before. But what I would say is I think I would still recommend you include that information, that analysis and that information. And here's the reason why. What if we come to a different conclusion in terms of environmentally preferable than you did? Let's assume, you know let's say perhaps we determine one of the alternative sites is environmentally preferable. Then we're going to have to go through that next step. And if the information is already in your environmental report, it makes it much easier to move forward than if we're then having to scramble to try and get that information.

MS. DUBINSKY: Okay. Thank you.

MR. KUGLER: Okay.

MR. POSLUSNY: Any other comments or --

MR. CUDWORTH: This is a two-step process you've described. First is it environmentally preferable and second is it obviously superior. That's news to me.

I'm aware of the decision making standard which is really based around the latter, is

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there an obviously superior site.

Environmentally preferable in a NEPA sense is usually how agencies go about deciding -- choosing between alternatives and pick one as the one they're going to propose going forward with.

So I'm wondering is this something new or is this something you've been doing? Is it documented anywhere that I can look at and learn about?

MR. KUGLER: Well, it was both in the old ESRP 9.3 and it's obviously still in the new one.

MR. CUDWORTH: Nine?

MR. KUGLER: Nine point three. That's the sites -- well, it was called alternative sites. We've revised it to site selection because that's really what it's more about. But it's always been in there.

I didn't go back through all of the record. The concept of obviously superior came about, I think, in the late '70s. And my suspicion is, but I don't know this, that prior to that we may have just looked at the environmental impacts, but that at some point the issue of other factors came

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into play. But basically what it says, this is the way I've always looked at it at any rate, is the first thing we do is we look to see if there's any alternative site that looks clearly better from just an environmental perspective. And if the answer is no, then all those other factors really don't matter. Because you're going to make the business decision. The industry is going to make that decision. So we're going to assume that you wouldn't choose to build somewhere that was a bad business decision. And that's not really important to us at this point.

What it really does is it recognizes that even if an alternative site is judged to be preferable environmentally, there can be reasons to choose a different site.

It also recognizes another factor, and this is discussed I think in a Commission decision back in the late '70s. We know the impacts at the proposed site pretty well. You know, you guys have investigated it. You've done all your work, we've done all our work to try and make sure that we've accurately characterized them.

At the alternative sites it's done at a

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higher level. Generally done at a reconnaissance level. And what that means is that there is the possibility, if not the likelihood, that there are some issues at the alternative site we don't know about or we don't realize how bad they may be. So part of the reason for that differentiation or that second step is to recognize that just because it's a little better environmentally, doesn't necessarily mean you want to go there. Because when you go there you may find out that, gee, it's not as good as we thought it was. So I think that's another factor that comes into doing that second step.

So far I don't think we've had to exercise a second step. I know we didn't in the three early site permits, the first three. I don't know if we ever did back in the '70s. We may have, because my recollection is that the plant at which it came up, the issue was whether or not to consider sites owned by another utility that might be somewhat better environmentally. And part of the answer was, well that may be but the institutional barriers to doing that are so great that they outweigh any minor differences in environmental aspects, especially because we haven't looked at

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those sites nearly as closely.

But it has been in there from, I guess at least from-- I think it's been in there since the NUREG-0555, the original ESRP.

MR. CUDWORTH: You're calling this an ESRP. ESRP 9.3?

MR. KUGLER: Nine point three, right.

MR. CUDWORTH: Okay. I'll ask him.

MR. KUGLER: Okay.

MR. BELL: I will just look around. Is it clear enough to us that it's a reconnaissance level look at the alternative sites for those considerations, or does the guidance need to be clarified in that respect?

MS. CERAFICI: I think everybody's looking at me. This is Tamar.

I think that you have described the process very well insofar as you talk about it. However, I think in the application the level of reconnaissance review changes from site-to-site and from site review team to application review team. And, hopefully, that we can work into some changes into 9.3 that will give us some more specific guidelines as to what a reconnaissance review would

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be or even more basic than that: What is an appropriate process or decision making process, I should say, for identifying alternatives within the candidate area? Region of interest is easy. Candidate area is easy. However, there are infinite numbers and types of sites that can be developed within a candidate area.

And there is no clear guidance for the staff or for the applicant to define what an appropriate level of review at the candidate site piece will be. And we can't identify 700 different sites and narrow them down to give. It makes it very problematic without further guidance than that.

And even 700, when you've got a region of interest as large as, say, PJM which is the RTO for this area, there are infinite number of green field/brown field and the existing plant sites that could be developed. And so some sort of guidance in that area as to what our reconnaissance look would be would be very much appreciated.

MR. KUGLER: Okay. Well, that's a new comment, but we'll keep that in.

MS. CERAFIGI: And I am very sorry.

MR. KUGLER: But we'll take that under

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consideration. Because I understand what you're saying. And it is an area that's harder to define.

But I do realize that the guidance documents don't really tell you how to get through those steps. They're fairly general.

MS. CERAFICI: And it's that middle step. The other steps I'm very happy with the way that the staff have kind of changed the way of looking at site selection as a broader process. But getting from the candidate area to the alternative sites is still very gray and is still open to a lot of interpretation from the applicant and from the staff.

MR. KUGLER: Okay.

MS. CERAFICI: I think it would speed up the process if we were to get a little more information on that from you.

MR. KUGLER: Okay. All right. Thank you.

Anything else on this subject?

We're actually well ahead of schedule, which is surprising.

MR. POSLUSNY: Would you like to march to the next subject and then take a break or take a

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break now? Your choice.

MR. KUGLER: Actually, I think what I'd want to do is take the break because the people who are going to join us from PNNL are probably not on the line yet.

MR. POSLUSNY: Okay.

MR. KUGLER: So what I would recommend is we go ahead and take the break and we can try and contact them and let them know we're ahead of schedule.

MR. POSLUSNY: Okay.

MR. KUGLER: And see if we can get them on the line.

MR. POSLUSNY: Let's be back at around 2:15, please.

MR. KUGLER: No. More than that. 2:20. Why don't we give them until 2:20?

MR. POSLUSNY: All right. Sounds good.

MR. KUGLER: Depending on which clock you read.

Mike, are you still on the line. Sounds like Mike dropped off.

All right. So we'll take a break and then we'll try and get the folks from PNNL on the

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line.

MR. POSLUSNY: Okay. Thank you.

MR. KUGLER: Thank you.

MR. POSLUSNY: Please be back at 2:20.

(Whereupon, at 2:04 p.m. a recess until 2:21 p.m.)

MR. KUGLER: Now, the folks from PNNL, because we already had this scheduled. We tried to get word to them on the break, but we ended up leaving voice messages. So we're not sure if they're going to be able to join us or not.

The next section we were going to talk about socioeconomic and environmental justice. And basically all the comments in that area were in environmental justice. Most of the comments the staff either agreed with or mostly agreed with in the sense, I mean I know at least one that didn't make the list, the recommendation included using the term "peculiar" in terms of describing populations or impacts, or what they used. And we would prefer to use "distinct." So we didn't completely agree, but you know in essence we agree with what industry's comments proposed.

There was one comment that I

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definitely wanted to talk about. This was on page 4 of NEI's enclosure. And in it the industry recommended defining subsistence populations in a different way. And what it said was to redefine it as those who rely on fish and/or wildlife for more than 50 percent of their diet.

I would really have preferred to have the folks on the line from PNNL because they're more of an expert in this area than I am, but I did look at-- I'm sorry. Hey, you got to use microphones. But Russ was suggesting maybe flip-flopping. I guess we could do that. We weren't going to have anybody on line for cumulative impacts. You want to go ahead and --

MR. POSLUSNY: Put that at the end or at the point they come on line.

MR. KUGLER: Okay. We could do that. Okay. Why don't we do that.

We'll go ahead and we can talk about cumulative impacts. Okay.

There weren't too many comments in this area, and some of them I think I actually treated elsewhere. Because I think one of them had to do with cumulative impacts for cost benefit and another

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one had to do with cumulative impacts for -- oh, somebody just joined us.

Who just joined us, please?

MR. ANDERSON: This is Dave Anderson.

MR. KUGLER: Okay. All right. Well, then we can continue with socioeconomics. We were going to switch to another topic because we hadn't been able to get word to you guys that we were ahead of schedule.

MR. ANDERSON: Mike Scott is out probably for the rest of the year. He's supposed to be on vacation but it looks like his father is taking a turn for the worst and they're going to be dealing with him for some time now.

MR. KUGLER: Okay. All right. Well, I think the main comment I wanted to talk about in this area was one that you responded to at any rate, so having you on the line is good.

I was going to talk about the comment, and I think this was yours, in which the industry has suggested modifying the definition of subsistence populations. And what they had suggested was those who rely on fish and/or wildlife for more than 50 percent of their diet.

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You know, just in my looking at it, it wasn't clear to me where 50 percent had come from. And the proposed revision left out vegetation as a source of diet, which is in the guidance. So I wasn't sure if there was a reason behind that or not.

What the CEQ guidance that was published in 1997 provides as a clarification was that subsistence consumption was a dependence by a minority population, low income population, Indian Tribe or subgroup of such populations on indigenous fish, vegetation and/or wildlife as a principal portion of their diet.

What I was going to suggest, and I didn't get an opportunity to talk with Dave about this as a possibility, if industry is concerned about the way we stated it in our guidance, we could potentially adopt the wording from the CEQ guidance as an alternative. Would you see any problem with taking that approach, Dave?

MR. ANDERSON: Not off the top of my head. But I guess we don't want to get into expanding the definition. But what we found is there are certainly groups that are economically dependent

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on those same resources. They may not be for their diet, but they may have an economic dependence.

MR. KUGLER: And environmental justice isn't focused just on diet. I mean, that's just one of the aspects that's addressed. Obviously, in the LES case down in Louisiana the issue wasn't where they were getting their food, it was the impacts on the social fabric of the communities.

MR. ANDERSON: Right.

MR. KUGLER: Okay.

MR. ANDERSON: I think you could make that argument in other places, too, on the social side.

MR. KUGLER: Okay. At any rate, we would not see taking the definition that was proposed and using that, but we might potentially go back and we could consider adopting the definition as used or as provided in the CEQ guidance as an alternative.

Did you have somebody in particular to talk to that one or --

MR. CUDWORTH: Who else?

MR. KUGLER: Who else?

MR. CUDWORTH: Guilty. Jon Cudworth.

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MR. KUGLER: Okay.

MR. CUDWORTH: The 50 percent is just an interpretation of what principally means, as principally means more this than anything else and that's where the 50 percent comes from.

MR. KUGLER: Okay.

MR. CUDWORTH: So far as your question about why not vegetation as opposed to fish and wildlife, it's simply because everything comes from Executive Order. And Executive Order does not talk about vegetation. It talks about fish or wildlife.

Now I know that some of the other organizations, CEQ, EPA, a lot of people keep seeming to expand on what's subsistence. But I don't know that NRC has to follow those trends, and I don't know that they are appropriate. I think they're overreaching. I think that if we're doing this because of an Executive Order following subsistence populations, we ought to be following what the Executive Order says for subsistence population.

And I'm not disagreeing with you about your observation that environmental justice is broader. But insofar as we address what's a

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subsistence population, I don't think we should be expanding the definition beyond what's in the order.

MR. KUGLER: Okay. Well, I guess I would think in general terms Executive Orders, much like laws, often don't go down to the level of detail that you need to actually implement.

CEQ is the body that is the kind of the keeper of NEPA and the guidance on implementing NEPA. So I would give a lot of weight to what they have determined is the appropriate way to interpret that language. And that's why I lean toward that; that is a concept for dealing with it.

And in terms of principal, I suspected that's where the 50 percent had come from. What I would wonder, and I don't know and this is just thought, is that well, you know if it's 40 percent but there's no other contributor that's greater than 20 percent, then isn't that a principal contributor for them?

It's not clearly defined. That's obvious. I mean, they haven't defined what principal mean. Even the CEQ guidance doesn't define what that means. But I would be reluctant to go to a number because there is no clear guidance

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that says that's what it meant.

Dave, do you know of anything that interprets what that term "principal" means?

MR. ANDERSON: No. I haven't even really considered that.

MR. KUGLER: Okay.

MR. CUDWORTH: From a practical standpoint, Alaska is the only place you find what people call subsistence populations. There it's the Eskimos and Native Americans.

So if you want to look at any other possible authoritative sources, I guess that's one place to look within state practice.

The problem with leaving it with just principal is that if I say it's 50 percent or greater, that's easy to see, it's easy for us to discuss and decide yes or no. If you want to leave it as -- gee, 40 percent could be principal if nothing else is greater, than we start getting into difficult areas with interpretation and you're going to end up having to split a baby somewhere.

MR. KUGLER: Well, the truth is even if we defined a number, how do you measure it? Who measures that?

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MR. ANDERSON: Well, I would be surprised if there's any information that says that they're 50 percent or 42 percent or 28 percent.

MR. CUDWORTH: But what you do find is for risk assessment purposes there are governmental statistics on how much meat, how much fish, how much this, that and the other thing people eat in a year. So if you're relying on a 50 percent measure, you can 50 percent of that figure is what we look for: Does anybody eat that many pounds of fish in a year or more? Does any population do that, I should say.

MR. ANDERSON: Now who is to say where their meat came from.

MR. KUGLER: We lost part of that, Dave.

MR. ANDERSON: Whose to say where the fish or meat comes from?

MR. CUDWORTH: It's true that the Government statistics includes commercial as well as game, that kind of a thing. But even if you use the most conservative approach and go with the number as in all sources, it's still very difficult to find populations that rise to that level. I've not been able to find any.

MR. ANDERSON: Well, I guess I would

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argue that there's academic research that may not call it subsistence. They have other names for it. But even in the lower 48 outside of Native American populations there is research that documents provisioning activities, activities where people are acquiring food off the land for their family's consumption. It's not necessarily called, you know, subsistence and they may not measure the quantities of food, but there is work being done in that area.

MR. CUDWORTH: Yes, there is. And it's usually because of risk assessment needs. But that's not really where we are here. Where we are here is you're feeling there's a requirement that the agency has to follow in this Executive Order as it may be interpreted by CEQ. And that's what you should be following, not some of these other more esoteric kinds of things.

MR. KUGLER: Well, I mean from my perspective, here's the way I look at it. You said that you don't think there would be any in the lower 48. You may be right. I don't know.

I think what the Executive Order would have us do is look. And that's what we do, we look to see. And if we don't find them, then that's fine,

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we move on.

I don't think we've identified any in any of our reviews so far, and we may never. But I do think we have to look, and make a determination as to whether there's anybody who appears to meet or any group that appears to meet that definition.

You know, I don't want to spend too much time on this because I don't know that we're ever actually going to implement it, you know run into the situation unless maybe we go up to Galena.

I think, you know, if we got into the situation where it's really borderline and we could talk about it, I just don't know that we're going to see situation where it's going to become a critical factor.

I think the other aspects of environmental justice are more likely to come into play, to be honest, and be more concerned with those.

MR. BELL: Just to turn your words a little bit. I mean unless we deal with it this way, there's no such populations in the lower 48, then you're guaranteed to deal with it on every application because you have to take a look. So

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we're suggesting that there might be a path to not doing that every time, which would be efficient.

We talked about in the last week's workshop, maybe there's some things we can talk about in a somewhat different context about dealing with them generically.

MR. KUGLER: Okay. I guess I didn't remember as part of this comment it being a suggestion that we didn't need to look. I thought it was more that it was indicating how you measured it when you did look.

MR. BELL: Yes.

MR. KUGLER: Okay. All right.

MR. BELL: Although on that regard, I was interested in the comment about the definition of subsistence and whether the CEQ definition is any help in understanding whether that's with respect to diet solely or the economic, that they're drawing economic benefits in terms of income. It seems to me that that would expand the scope of subsistence or could.

I didn't recall that what you just read to us was going to be helpful there.

MR. KUGLER: I think I understand what

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you're saying.

Dave, I think what he's saying is in the context of the specific term "subsistence population," is that just related diet? And if there were other types of impacts, say they were relying on some resource for their livelihood, that might be in a different part of environmental justice but not as part of subsistence populations, would that be correct?

MR. ANDERSON: Well, I think there's two things, subsistence and then there's unusual resource dependencies. But just looking at the subsistence part of the Executive Order, it's an assumption --

MR. KUGLER: Oh, we're losing you there.

MR. ANDERSON: What is that sound? Do you hear that sound?

MR. KUGLER: Yes, we did. You faded when it happened.

MR. ANDERSON: Okay. The Executive order--

MR. KUGLER: Dang.

MR. ANDERSON: Sounds like a foghorn on my side.

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The Executive Order says only consumption. It doesn't define the term "consumption." And so, you know, we could probably go around and around about what consumption means. But it doesn't say diet or anything else, it just says "consumption."

MR. KUGLER: But I think the CEQ guidance points toward diet, doesn't it? I'm talking about whatever that was.

MR. ANDERSON: And that I don't have in front of me, and haven't looked at.

MR. KUGLER: Okay. We can take a look at that. And I think either way it came comes into play in environmental justice, maybe just in a different way. Because if it's effecting minority or low income populations adversely and disproportionately, then it comes into play in environmental justice but just in a different facet of it.

MR. CUDWORTH: Yes, I agree.

MR. KUGLER: But we can take a look at that aspect of it.

MR. POSLUSNY: But at this point we're not going to change <that> which we have?

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MR. KUGLER: Well, until we look at it, I wouldn't know whether it would be appropriate to change it. So --

MR. POSLUSNY: Okay.

MR. EMCH: I'm not sure if I'm in the right place.

MR. POSLUSNY: Identify yourself.

MR. EMCH: Rich Emch, senior health physicist with the NRC staff.

What's the impact we're actually talking about here? This may be just my lack of knowledge because I don't usually get that deep in this issue when we're doing one of these reviews.

Let me state it maybe. Is the issue that these populations are going to get more dose than somebody because they're eating this fish and wildlife?

MR. KUGLER: Well, it could be that or it could be that we're going to deplete the stocks of fish and they won't have them available to them. It could be like in the case of LES it was a situation where the building of the facility was going to disrupt the social fabric of two communities that used to interchange and now they

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wouldn't be able to. There's a lot of different aspects to environmental justice, but dose is one possible way that they can be affected.

MR. EMCH: Well, the reason I asked the question is you know the dose use or the usage factors, you know when we use the computer codes to calculate radiation dose, there are default factors.

I mean, there are numbers that we have used since the early '70s for the usage factors. You know, how many kilograms per year of fish does a person eat, you know when we're looking to see if there's any issue with the radiation standards in Part 20 or 40 CFR 190. And those usage factors are big.

MR. CUDWORTH: They're actually 50 percent of the normal consumption. Yes. They happen to use 50 percent.

MR. EMCH: Yes. Those usage factors are pretty big. And so the only point I'm trying to make is that, you know, environmental justice is about disparate impact --

MR. KUGLER: Disproportionately high and adverse, right.

MR. EMCH: Okay. And even if somebody is doing subsistence fishing or hunting or whatever,

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I guess what I'm saying is the point of the calculations that we do for dose assessment against the regulations, the dose standards, is to make sure that nobody's getting a dose bigger than dose standards and therefore, if they're not getting a dose bigger than the dose standards, I don't understand how it is that a disproportionate impact--

MR. KUGLER: Well, it has to be disproportionately high and adverse. And you're probably right in that regard. But it's not all about dose.

MR. EMCH: Okay.

MR. KUGLER: You've just got that health physics perspective.

MR. EMCH: Thank you.

MR. KUGLER: Okay. No, but I mean it's a good point.

I was going to say if I mute it, it won't do that. But that won't be much use to the people on the other end.

Okay. But dose is just one of the aspects we consider, and there are a lot of other aspects that come into environmental justice.

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That was really the only issue in environmental justice that we had I thought some concern with in terms of the comment and how we would respond.

Were there other aspects of those comments that somebody felt we needed to talk about either at the table or in the audience?

MR. CUDWORTH: This is Jon Cudworth.

If you are going to go back to CEQ definition and look at that principally versus whatever, I think you may also find in some of the CEQ guidance some confusion between or interchanging of the terms population and communities. And I would commend you on sticking with the response you have here saying you're going to go with populations.

MR. KUGLER: Okay. Yes, that would be our plan.

MR. CUDWORTH: Yes. Thanks.

MR. KUGLER: Okay.

MR. BIGGINS: Andy?

MR. KUGLER: Yes.

MR. BIGGINS: I would reiterate what you said before about looking at the Commission decision in the North Anna case for environmental justice

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because they had some very strong opinions on the environmental justice subject in that area.

MR. KUGLER: That's a good point, yes. That was one of the other areas. I didn't go into what the other areas were that the decision discussed. But that was one that they spent some time on. So if you work in that arena, that's a good thing to look at.

Okay. Anything else on environmental justice, socioeconomics comments there? Okay.

Put that aside.

All right. Cumulative impacts,

Let's see. Okay. The industry raised a concern with the focus of the cumulative impacts review indicating that we may not have appropriately explained what the CEQ guidance is trying to tell us. And the thing is that the statement that's in the environmental standard review plan is essentially a quote out of the CEQ guidance document. There was a CEQ memorandum June 24, 2005, on the issue of cumulative impacts. And on the first page of that, now they had quotations around certain portions of the phrase, but they essentially used what we used, which is they said "In

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determining what information is necessary for a cumulative effects analysis, agencies should use scoping to focus on the extent to which information is 'relevant to reasonable foreseeable significant adverse impacts,' is 'essential to a reasoned choice among alternatives,' and can be obtained without exorbitant cost."

So other than putting the quotation marks in, if you look at what we wrote and what's in the CEQ memorandum, it's exactly the same. The concern that industry had raised related to the commas and how it may have established a hierarchy among these causes.

Now looking at what the concern was that was expressed, it seemed to be that well the way it's structured if you meet any one of those clauses, it's in. To be honest, that's not how I read it. And that's not the intent. And I think the way it's structured is correct.

In other words, if it's reasonably foreseeable significant adverse impact, if it's essential to a reasoned choice among alternative and if it can be obtained without exorbitant cost, then that's something you include in the cumulative

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impacts. It basically should be all three of those things.

So I'm not sure if there's a problem with what we wrote. There may be an issue with how it's interpreted. But I felt it was reasonably clear, to be honest with you, when I read it. I got the understanding right away not having gotten into it beforehand.

So I think if we had meant it to be a situation for any of them to apply, we would have said the first clause, the second clause or the third clause. And then it would have been any one of them being satisfied would trigger being included in the cumulative impacts analysis.

So I'm not sure we actually have a problem. It may just be a matter of interpretation.

MR. BELL: This is Russell Bell.

It sounds like you agree that all three need to be true.

MR. KUGLER: Yes, I believe that's the intent.

MR. BELL: And because of the punctuation there may be different ways to read it.

So an additional sentence of clarification might be

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appropriate to underscore that in other words all three of these factors need to be true?

MR. KUGLER: Now we got to explain each sentence.

MR. BELL: Well --

MR. KUGLER: We can take a look at that.

MR. BELL: Just the really important ones.

MR. KUGLER: But I understand what the concern would be if that was the interpretation.

MS. CERAFICI: This is Tamar Cerafic again.

I also have a master's degree in English, and perhaps the editorial thing that Russ is trying to get to is some sort of bullet or 1, 2, 3 with the 1, 2 and 3 and it would be a formatting change more than anything else.

MR. KUGLER: Yes.

MS. CERAFICI: Things like that that can clarify and leave a lot of white space for people like me to write notes in would be great.

MR. KUGLER: Okay. I think, as I said, the issue -- well, let me pull out a different document here. I've got paper everywhere.

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Two of the other comments that were in cumulative impacts we agreed with. And the other we basically agreed with just, you know, we may word things a little bit differently.

So I think that that was all that I had under cumulative impacts.

Now there were -- I think one comment I did not include under cumulative, I included it under alternative sites, it questioned whether cumulative should be addressed under alternative sites. But, again, it was one we agreed with so I didn't spend any time on that when we discussed alternative sites. But I don't think there's anything that we would need to discuss in that regard since we agree.

And that was that cumulative impacts are not used in the comparison of proposed and alternative sites.

Are there any other questions about the comments on cumulative impacts?

MR. CLAYTON: You might want to expand just a little bit here and talk about the changes that we anticipate down the road, in not only the ESRP but in the Reg. Guide 4.2 and interim staff

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guidance that Rich is working on cumulative, how we would address cumulative impacts for the new definition of construction on the LWA rule.

MR. KUGLER: No, I don't. Well, let me do it.

MR. CLAYTON: Well, now you have to. Now you have to.

MR. KUGLER: I don't know how much I can say because the guidance is still under development.

MR. CLAYTON: Yes, we don't know all the answers yet, that's for sure.

MR. KUGLER: Right. The rule change, we talked a little bit about it earlier. Jim read the quote out of the rule. It says, you know, you have to provide in your environmental report the impacts of these other activities and address the cumulative effects of the proposed action and these other activities.

We're working on developing guidance related to that, because it is something that's different, very different than what we've done in the past. And it will have a lot of effects on the ESRP. I think probably most of the sections in Chapter 4 are going to have to change in some way,

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or at least many of them. Because they address the construction impacts and now a lot of that construction is not part of what we're evaluating directly as part of the project. So we know we have changes to make there.

I was actually a little surprised there weren't comments in this regard. Although the rule didn't go final until just before -- the rule went final just before the comment period ended and it became effective last month. So maybe you guys just didn't have a chance to consider that. But it was out on the street, and I think you guys pretty much had in front of you what the contents were going to be. But there are going to have to be quite a few changes related to that, just to add a few more things for us to work on.

We will be working or we are working on some interim staff guidance in the meantime, just to get -- well, to get something out so people have some way of trying to determine what you as an applicant need to do and what we as a staff need to do to address the changes in the rule.

Jim, I don't know if you wanted to say anything beyond that or --

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MR. BIGGINS: No, I think that summarizes it.

MR. KUGLER: Great.

MR. BELL: My understanding is that that ISG might be issued in draft form in the end of January. Is that consistent with your understanding?

MR. KUGLER: Yes, that is.

MR. BELL: Okay.

MR. KUGLER: With the caveat of "might."

MR. BELL: Yes. Yes.

MR. EMCH: That is the schedule.

MR. KUGLER: That is the schedule, yes.

MR. EMCH: And I don't know what comment period will be attached to that. I was told that that was also not yet determined. But because of the importance of the LWA and maybe some of the complexity here, it might warrant more than a 30 day period, which I think has been typical or used in the past. But we'll talk about that in other places.

MR. KUGLER: Yes. That'll be a separate discussion. But it is something that will affect our work on the ESRP. Just doesn't directly effect what we're talking about today.

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MR. CUDWORTH: This is Jon Cudworth.

You didn't get any comment from me, because I understand your need to look into cumulative impacts more than you have historically.

Obviously, we would have some concern because that's almost the universe of impacts that you could possibly look at. Cumulative can be a real big gorilla.

I'd like to suggest that you consider some comments that we made last week in our overall meeting about how NEPA tells us to focus on significant issues. And maybe in conjunction with the effort to identify what we think are the consistently significant issues, those then become right for the kinds of things you look for as potential cumulative -- areas where you also worry about cumulative impacts.

MR. KUGLER: I understand what you're saying. Cumulative is a very difficult area. And I'll give you an example of why I think it's really challenging just based on what you just said.

It's pretty straightforward, I think, in most cases we're going to look at water. You know, everybody knows water is a big deal. But, you know,

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part of the idea behind cumulative is that the impact of the proposed action might be small, but the cumulative might be significant. And I think that adds a challenge to figuring out how you do set your boundaries.

What we have tended to do -- what we did in the early site permits, I think, was we kind of generically spoke to the areas that we felt did not warrant any detailed review. And in the areas that we felt required some more look in terms of cumulative effects, we addressed in more detail. So we did try and follow that basic concept of don't spend a lot of time on things that really you don't think are going to matter, but focus more on the things that we are likely to have an important cumulative effect.

So we're cognizant of that. It's a challenge figuring out exactly how to do that in all cases. But we understand.

Okay. All right. So that was cumulative.

In the accident arena, we had hoped to have somebody from PNNL on the line, but they would have been scheduled to come on the line, let's see

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we had scheduled that for 3:55 and it's about 2:55. So we're about an hour ahead of schedule. So I haven't heard them come on the line, I suspect they won't be.

To the extent that I can manage this without them, we'll do that. If we find that there's something we can't get through, then maybe we table that until they do come on the line. But I do expect the individual at PNNL to come on the line at some point. A lot of your folks know him. That's Van Ramsdell out there.

MR. HENDRICKSON: I'll see if I can speed that along.

MR. KUGLER: Okay. All right. Paul will see if he can reach him again. He'll try again.

There were basically just three comments in this arena, so there weren't a lot.

One of the comments had to do with some proposals for changes to section 7.1 of the ESRP. We haven't revised that one yet, so we'll take that comment and we'll hang onto it. But we're not going to do anything with it right now because we're not up to the point of revising that section.

The second comment had to do with the

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distance over which accident impacts to water should be considered. It's a little hard to explain, but basically in Chapter 7.2 it said look out at water sources out to 50 miles. And the comment from industry said well, you know, in ESRP 2.3.2 which is related and they cross reference to each other, it doesn't talk about 50 miles. And generally speaking when you're dealing with water, you deal with the watershed that's being used. And that's true. And that's usually the focus in Chapter 2. But I think the point we're making in section 7.2 is that if there were a severe accident and if there were significant releases from the plant, the releases don't end at the edge of the watershed. And typically for those purposes we've used a 50 miles radius, and we feel that it's appropriate to continue to use that radius in considering the impacts of the accidents.

So that's the reason it was built the way it was. I think we feel it should remain that way.

Do you all have any feedback on that? I don't remember whose comment this was, was whether it was NEI or -- I think it was NEI. It came from

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industry.

MR. BELL: I think so, but I don't think the author of this comment is here today.

MR. KUGLER: Is here? Okay.

MR. BELL: So like you to expand on this particular one.

MR. KUGLER: You understand I think what we're saying. And I guess, you know, we'll be working on these sections over time. If you feel like we misunderstood what you were getting at, you know if you can give us that feedback.

But I think if I understood it correctly, I think our answer is no. There's a reason we did it the way we did, and we think it's appropriate to do it that way. Okay.

The third comment relates to severe accident mitigation alternatives other than those that are designed related. So these could be for training and procedures, primarily, is what we would be talking about. And as we understand it right now, I have not been involved in design certifications directly, but our understanding is that the coverage of other than design related mitigation alternatives is uneven, let's say. Not

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all the designs certs are doing it the same way.

So we continue to believe that it's incumbent on the applicant and the staff to make sure that these other types of alternatives have been considered somewhere. And that's why we've included it here. If it was not addressed in the design certification and already dealt with, then we need to deal with it at this stage in some form.

I'm not going to say what form that's going to take, because it may be a relatively simple analysis. I know in discussions related to this we've talked about the fact that because of the low residual core damage frequencies that the -- I'm trying to remember exactly how to phrase it. The value you have to get to, the cutoff where it becomes not cost beneficial is pretty low. And it may be possible to address it in those terms. I'm not saying that we have to necessarily have a procedure-by-procedure, training module-by-training module, analysis. But what I'm saying is it does have to be addressed somewhere.

If it was addressed in design certification, it's been dispositioned, then the approach that was discussed in the industry comment

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would be appropriate, which is you just have to show you're within the boundaries of the analysis that was done for the design cert, and we're done.

If it was not addressed in the design certification, then what we're saying is then we have to address it here in some form. Okay.

So, again, I think we still believe that's the appropriate approach. If we do need to clarify something on that, and again you may not have the right person here to speak to that, but if there's some part of it -- you know, maybe the point was maybe we need to clarify exactly how that works. So if I'm missing some aspect of that, let us know that. But in terms of the basic approach, we believe it's the right approach to take.

Okay. All right. And that was all the comments under accidents. So we've covered all of them in detail, unlike some of the other sections.

All right.

MR. POSLUSNY: Any comments on that?

MR. KUGLER: Any other comments from anybody?

MS. RICE: This is April Rice.

Just in the industry comments it's

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suggesting that an approach similar to what Southern used would be acceptable. Can you comment on that?

MR. KUGLER: I'm not familiar with exactly how Southern handled it, to be honest.

MS. RICE: Okay.

MR. KUGLER: We'd have to get somebody who knew more about that application.

MS. RICE: Okay.

MR. KUGLER: I mean, the person who wrote the response at PNNL is familiar with Vogtle. I suspect it's probably consistent with what we were just talking about, though.

MS. RICE: Okay.

MR. KUGLER: I think what it might be trying to get at is that might be an example of the level of detail we're looking for in how far you have to go.

Okay. And we only have one topic left, which is everything else.

There were a number of comments what I put under "other." They covered a pretty broad range of topics, but there weren't a lot of them so it was kind of hard to say well let's put this into a specific topic.

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What I'm going to do is I'm going to speak about some of the more significant ones, and at the end of a discussion on each of those, in some cases it may be multiple comments of a common theme, I'll see if we're okay with where we're headed. If everybody's okay with that or if there are questions or comments.

And then some I probably just won't talk about it at all. They were just kind of minor things that I don't think rise to the level of discussion here.

There were a couple of comments related to cost benefit I wanted to address. And they raised concerns about the need to put costs and benefits in monetary terms. Now, the way we intended it, and maybe we need to clarify, but the way we intended it is that to the extent practical, costs and benefits should be put in monetary terms.

As we discussed in the denial of the petition of rulemaking we discussed earlier, the denial was September 29th of 2003, the intent is not to require extensive or onerous evaluations. Rather where reasonable estimates can be made, we're asking the applicant to do that. So examples might be to

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include estimates of the taxes that are likely to be paid or the wages that are likely to be paid to the workers at the site, and therefore feed into the economy in the area.

In many cases the information we're talking about is already really available. Because when you do, for instance, socioeconomic evaluations in Chapters 2 and 4 and 5 of your ER and of our environmental impact statement, you already look at a lot of these things. You talk about the tax benefits and you talk about the impacts on the economy in the local area and things like that. And generally you speak to them in monetary terms. So I think a lot of that information is out there to be used.

Now what we're not asking you to do is go out and create numbers through some complex analyses to try and define a monetary value for something that's not easily converted to monetary terms. And some of these impacts can't be converted very well. And that's fine. We recognize that.

What we're asking is that to the extent it's practical to do so, putting it in monetary terms just allows us to do a more straightforward

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comparison of benefits versus costs. Generally costs are challenging in some areas.

Now, of course hopefully you have some idea of what it's going to cost to build a plant, so you can give us that.

The benefits, the primary benefit and we talked about early is the power you generate. And, you know, some reasonable estimate of what that's valued at I think you can come to pretty easily.

A lot of times other benefits can't be easily quantified. You know, it's going to improve recreation in the area. Okay. It's a benefit, it really can't be quantified, that's okay.

So I think our intentions are in the right place. Now it may be that we need to clarify that in the chapter, I don't know. I mean, what are the views that you all have?

First of all, does my expression of what we're trying to get to make sense to you? Does that sound okay? And then do we need to do something to try and make that more clear in the guidance?

MS. CERAFICI: The statement of your intention is very clear. And I would hope that it's better reflected in the next iteration of the

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chapter.

One of the concerns that I have found is that we have prepared these analyses and have them in review is the minutiae of some of these issues, such as how many trucks you're going to use and how much gas is going to cost. There are certain level of minutiae in the cost benefit analysis that may not necessarily assist the staff in its independent review of the cost and benefits. And those should either be clarified or taken out. I think that's really the general gist of the industry review.

MR. KUGLER: Okay.

MR. CUDWORTH: Jon Cudworth.

Just simply as you just did, clarify that cost does not equate to a monetization, that cost can be non-dollar values.

MR. KUGLER: Okay. I think that's in there. But we can take a look at it and see if we can make it more clear.

MR. CUDWORTH: Yes, I was trying to find it. And you may be right.

MR. KUGLER: Okay. Well, I think you know it could be in the form of we say to the extent practical, you know, put these in monetary terms

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which means, obviously, in some cases you can't. But we can look at that.

MR. CUDWORTH: I'm sorry. The technical rationale is talking about reasonably detailed information about the economic costs is needed. So maybe just some clarification would be better.

MR. KUGLER: Yes. Well, again, if it's economic costs, those are the ones you probably can quantify reasonably. It's the ones that are not so much economic that usually are more troublesome. And those we recognize may not be in money terms. Okay.

Well, we'll take a look at that. And we can take a look at ways we might be able to make that more clear.

MS. CERAFICI: And just as a point of suggestion, section 8.4 actually does have one of those catchall phrases. And it's page 8.4-7 of the new review. And it talks about criteria that -- the preceding criteria that may not be met, but it looks at benefits that might possibly be -- or costs that might possibly lack that monetary or the capability of being definitely analyzed.

For example, a need to diversify resources. A potential to reduce the costs. Things

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like that that are, as you say, we need a catchall phrase that will help us help the applicant to be a little more specific and have the information you need and not too much more.

MR. KUGLER: Okay. All right. I think I understand that. Anything else on that one from anybody?

MR. BELL: Andy's mentioned that costs sound like something that is quantifiable, and the value of the electricity I think is something that you mentioned that it starts to sound like you could get into that proprietary concern again. That's the only cautionary note I would throw up regarding your expectations there.

MR. KUGLER: I guess one thought real quick on that, though, is for instance in relation to the value of the power, you may have -- you being a utility may have a number that you expect to sell power at. And maybe that's proprietary. On the other hand, for the purposes of the environmental impact statement for doing the cost benefit you could probably use here is an average value of electricity in the area, and use that for the purposes of this evaluation, which might mean you

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have to do an extra calculation. But I don't think it's a very complicated one if you're saying this many gigawatt hours and this is the cost of it, it's not a hard calculation I don't think.

But I understand what you're saying. Again, I would not typically expect proprietary information to creep into this area. If there are aspects that we don't understand that might cause that, if you can help us to understand that, we can see if there are ways to work around it. But one of them might be sort of like what I suggested, which is don't use the proprietary in this calculation. Use, you know, generally available information. Because it's an estimate. And this is not, gee, if it's off by in the fifth digit, it's going to make a difference.

MR. BELL: Andy, you said a couple of times if you can help us -- your words if you can help us, we can help you with clarifying that or identifying those kinds of issues, please do. But what mechanism are you thinking?

I mean, here we are. I know you're not looking for new comments. You're going to revise and reissue. I forget, are these for use and comment

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right now?

MR. KUGLER: Yes, they are.

MR. BELL: When you revise and reissue they'll be?

MR. KUGLER: For use.

MR. BELL: For use. Okay. So my question is how can we help you?

MR. KUGLER: Well, in these areas that we've talked about if there is some way to poll the folks in industry. You know, this is one where you might say you know when we get into doing the cost benefits, do we run into -- especially the people who are well along in preparing their environmental reports, have you run into issues where you feel like you're being asked for proprietary information. And if the answer is no, then we don't worry about it any further. But if the answer is yes, this is what we ran into, if you can feed that back to us in some form I would see something that we would have to be able to docket, but if you feed that back to us in terms of describing what the issue is, then we can understand it better and we may be able to find a way to accommodate in the revised guidance.

MR. POSLUSNY: Sort of like lessons

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learned as they're implemented as you start using those.

MR. KUGLER: Well, it can even be before we implement them. I mean I'm thinking in the near term within the next couple of months if we can get feedback on some of these things, we could try and work it into the next rev.

MR. BELL: The more natural way, and it's a ping-pong game. You have the ball even though you aren't taking new comments, I think you're getting additional insights into some of the comments and concerns today and you'll factor that into the redraft.

MR. KUGLER: Right.

MR. BELL: We can't iterate this forever, and I understand that. But the natural thing would be okay. You've heard us. You're sensitive to this. Let's see what you do with it and then that gives us something to focus on.

Now, a reissuance of this in some draft final form. You mentioned the April time frame for when you wanted a final for use. Backing up from that if it's available in some draft final form, I

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think that might be the more efficient course. That is something we can talk about offline in terms of process.

MR. KUGLER: We can take a look at that. We can take a look at it.

Okay. But, I mean I guess my thinking on it was just that, you know, if this -- I can't picture where proprietary would come into this necessarily. So there's nothing I can really do to modify the guidance for it.

If I had a better idea of how it might play out or where it might come into play, then I could look at ways to fix it. And that's all I was saying. If we can get some sort of an idea in the relatively near term, we can work it in. And if not, then we would issue the revisions. And if we find that we need to make further change. I mean it's a living document. It is something that we'll continue to work on over time.

Now, hopefully, you know these sections become relatively stable, though, in the near term.

Obviously for the purposes of the applicants that's desirable, and for the staff as well.

MR. BELL: I think it will get that way

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because of what Jon said. We're going to actually use this thing and we're going to trip over things.

MR. KUGLER: Yes.

MR. BELL: And we're going to call those lessons learned. And you'll revise the thing again in the future to fix those.

MR. KUGLER: Certainly.

MR. BELL: Yes.

MR. KUGLER: Okay.

MR. CUDWORTH: Jon Cudworth.

You said here at the table two things that really make a big difference in this. One was that monetization should be done to the extent possible, whereas I'm not sure that kind of flavor is in the reg guide and the NUREG. And now you've also talked about using typical data or data for the area or generic data.

I would agree with that approach, and that's what we have done when we couldn't come up with the specific stuff. But the wording here really seems to be aimed at telling the applicant to give their data.

MR. KUGLER: Okay. And that's something we can look at now. I mean, we can put it in the

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context of, again, not being an onerous process, but to the extent practical putting things into monetary terms.

And I guess I'm still not sure how to address proprietary exactly, but you know we're looking I think for a reasonable estimate of the cost and the benefits. And I think as long as we get to that endpoint, we'll be okay with it. But the guidance may not be clear enough in that regard, and we can take a look at that.

MR. CLAYTON: Yes. Just using typical data, I would make it typical for where the plant is, though. You know, we're talking about labor costs. Don't compare Philadelphia to Alabama. You know, use the labor costs in the area you're in. It can be typical labor costs, but typical for the area where the activity is going to occur.

MR. KUGLER: Okay. All right. Okay. The next comment I want to talk about, this was a comment related to the introduction. And I know for sure it came up in the public meeting. I can't remember if it was among the written comments or not. But this was a comment saying we should revise the introduction to acknowledge that design level

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information may not be available at the time of application.

The staff maintains that this design information is information that it needs to perform its independent assessment. And I want to go back to this. You hear this phrase from us a lot. We have to independently determine what the impacts are. It's a little bit different than the way things work on the safety side where the licensee's document, the SAR is the document really in the end that matters. The regulations tell the staff we must independently assess the impacts. It's very difficult to independently assess what the impacts are if we don't know what it is you're going to build.

Now, having said that we recognize that -- I mean, first of all we're doing this a bit further out than we used to. We're now licensing you to build and operate at one time, whereas before, you know, we licensed you to build. You went it and built it and then you come back and tell us well, we built it a little different, this is what we actually did and we can supplement the environmental statement for the construction permit

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with the environmental statement for the operating license. We don't have that option anymore. It's gone.

Despite that, I don't think that this is an insurmountable problem. And I want to try and explain why I say that.

I understand that you may want to make a choice later on what you're actually going to build. But we need to evaluate today what the likely impacts are going to be of your plant. What I'm going to suggest to you is in most cases you can select a design that you're familiar with and provide that information in your application and explain what the impacts of using that design will be. Okay.

What does that mean for you down the road? We issue the combined license, the EIS was based on that design. Well now the time comes to actually decide what you're going to build and there's a new system out there and it's even better, and you'd rather get that, or it's cheaper and you'd rather get that. What do you do?

I expect that every combined license is going to have an environmental protection plan. And

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one of the basic pieces of an environmental protection plan, and I'd refer you to -- we issued amendments for three of the Entergy plants back in, I believe it was April of '03. One of the basic pieces that we retained in the environmental protection plan is a change process. And it's similar -- it was kind of structured like the 50.59 process a lot of people are familiar with. It says you can do changes, tests and experiments that effect the environment and you don't have to talk to the NRC about it as long as it doesn't involve an unreviewed environmental question.

Oh, great. We've invoked a new term. What does that mean? Well, it goes on and it tries to explain what an unreviewed environmental question is. And you know this is semi-quoting out of Grand Gulf's environmental protection plan. It's an unreviewed environmental question if it concerns a matter that could result in a significant increase in any adverse environmental impact previously evaluated in the FES or various other documents that might have come after the final environmental statement, or if it's a significant change in the effluents or the power level, or if it's a matter

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that was not previously reviewed and evaluated by the NRC which may have a significant adverse environmental impact.

What this means is sort of like 50.59. There are a number of things you can do to your plant without coming and talking to us. If you want to change your intake design and it doesn't take you significantly outside the bounds of what we've already analyzed, go ahead. You can do it. The environmental protection plan will allow you to do that.

If you want to use a different water treatment system. If you want to use a different -- well, I don't want to use the liquid radwaste system because that has safety implications as well. It gets a little more complicated.

The bottom line is think about what you do at your plants today. Can you change your intake today? Within certain limits, absolutely, as long as you don't trip over the requirements of the environmental protection plan, you can change it. You don't have to come to us for that. The same would be true once we've issued a combined license. If you want to change the design for these systems

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that interface with the environment, as long as you don't go outside those boundaries or trip over those requirements in the environmental protection plan, significantly outside, you can do it. It's within your power to do that without coming to talk to us about it. It doesn't require you to do any further licensing activity with us. So I think that is an option that you have.

I know I've talked to some of the applicants about, you know, considering something like that. Because I know you're struggling with the fact that we may not really make a final decision for another five or six years on what we're going to do with this system. Because some systems you can probably buy and install in a year. So I understand that issue you're facing. But we're also facing the issue of having to review the environmental impacts and do an independent assessment. And to do an independent assessment, I still believe and the staff as a whole still believes we need to understand what the design is that's going to be built.

So that's the basics of what I wanted to say on that.

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MR. BELL: You need to know the information of the design that's going to be built.

But I think what you're saying is we could include a design for an intake structure in the application that may not be the design -- maybe it's a design that's across the street or at my sister site.

I think the follow up question that comes is that's submitted to you as though it's part of the application. It is subject to your technical review and RAIs. And you put the applicant -- this scenario puts the applicant in a funny place answering RAIs about a design they probably know they're not going to build.

The change process I think will come in handy. But I mean what is your take on the situation that that might put an applicant in defending a provisional design?

MR. KUGLER: Well, I thought about that a little bit. I saw that that would be an area that might be a concern. I think I would typically expect applicants to pick something they're familiar with already, which would make it relatively easy to work with.

You know typically, especially if you're

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building a plant at a site that already exists, oh gosh you already know this intake structure not only works, but it's okay with the state too and, you know, it's something you could get a permit for most likely.

So I think in some respects that can be worked with. It is, I think, going to be a little challenging to do, but I've been struggling with what other options there might be unless you're willing to actually choose another design today and submit that as part of the application. And I think the problem has been mostly applicants, in at least some of the systems, are struggling with that. That they're not really -- you know, it's something they want to pick later because things evolving and systems get better.

And usually that's one of the reasons I'm not as concerned about taking this approach, is generally the systems get better over time. And so the impacts tend to get less. So I'm not too worried about you getting into a situation where you're going to have to come back for an amendment in order to go with something else. The odds are that whatever you chose would fit within the bounds of

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what we've already analyzed, or at least not be significantly outside of it.

But it is something. You know, we maybe all need to go back and think about a bit. What are some of those implications? I mean, the other aspect that I thought about was well, you know is an applicant going to feel like well am I being truthful in my application. You know, I don't know what I'm going to build. I guess it could be this, but I don't know.

And maybe you caveat it that way. Say, well, we may decide on something else later but for now this would be our best guess at what the design is. Maybe that's a way to deal with that aspect of it.

MR. CLAYTON: Yes. I would think you'd definitely want to do that because you could really lose face quickly if you end up saying we're going to do this and then make changes to ten systems because of -- but if you caveat it and say this is a good guess of how we're going to build the system right now, and then you build something better later. Yes.

MR. KUGLER: I think the challenge for

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us is -- I mean, I think what some in the industry would prefer to do is something like -- sort of like the PPE approach that was done on the early site permits, which is say well we don't know what we're going to build, but the impacts will be no worse than this.

The problem that we run into is then we're left in a situation where we need to independently assess what the impacts are going to be, and you're just telling us what they're going to be. How do I independently assess whether that's reasonable or not? I mean, we don't have the design so we don't know how you came to that.

MR. BELL: Well, in the case of PPE those parameters, they didn't come from just anywhere. They came from actual designs. And presumably, it would work the same way on an intake structure. You would choose design parameters based on existing intake structures, or ones on the market.

MR. KUGLER: But I'll point out that there's one key difference right now, and that is this. When we did the early site permits, Review Standard 002 said look, this is an early site

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permit. We expect that designs are not going to be final yet. Therefore, staff instead of looking at the design we're going to let you use your judgment because you'll get to look at the design later when you get your combined license application in. I mean if you read through it, it pretty much says it along those lines.

Now we're talking about the combined license. There is no next step. This is our one look at it. And there is no guidance document like the Review Standard for early site permits that says hey it's okay not to follow what the ESRP tells you to do, because that's what we would have to do to follow that approach. We can't follow the ESRP because the environmental review plan says look at the design, look at its interfaces with the environment and evaluate what the impacts are. And we can't do that if we don't know what the design is.

So the Review Standard allowed us to deviate from the ESRP for the early site permits only. But we don't have that option for the combined licenses. So that's one of the reasons we're really struggling with it at this stage is, okay, yes we

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don't have that latitude anymore, not at this stage.

Because this is the last stage.

MR. BELL: It turns out and we're learning that in terms of the engineering and procurement process applicants aren't in a terribly much different position at COL with respect to this kind, then they were as ESP. Especially when the ESP and COL kind of follow quickly on each other, like the ones we're familiar with are.

MR. KUGLER: Well, but it was probably a good four years from the application for the ESP to the -- if not more.

I understand --

MR. BELL: The other answer, and you haven't gone this direction in the last few minutes, is level of detail. Is this a level of detail issue. And I haven't heard that.

And maybe this links up with the bounding kind of approach which you have concerns with. How can you make a decision unless you know the design? Well, if we could agree that the design could be described to a certain extent at this stage, that may provide the applicants some additional flexibility that comports with where they

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are in their engineering and procurement process as opposed to the level of detail that's currently expected under the ESRP.

That's a little different take, and I'm not sure whether Southern's gone that route on their ESP or not, or whether you've --

MR. KUGLER: I'll be honest. I've not been heavily involved with the Vogtle review side. I'm not that familiar with it either to know. I don't know that we have anybody here who would be able to answer that.

I mean, to take that alternative approach I think would probably require some pretty major revisions to the ESRP because we'd have to take out the level of detail that currently exists throughout the document.

I think it would take a hard look at what's there now and ask, you know, with the right technical reviewers what do you really need. And maybe the answer is, yes, we really need all this. But I'm not sure we've gone to that effort yet. I'm not sure we had time to do it because there was such an urgent need to serve the applicants in the room today and moving forward today. But, again, if it's

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something that just is harder and takes longer, we shouldn't be put off by that but perhaps should take that on as a longer term action to look at the level of detail that's called for there.

MR. POSLUSNY: Could I ask a question? Are you suggesting at point A that you give a high level description and then maybe a year and a half <later> they could fill in more detail at that point, or are you saying there's a certain level of detail that can be provided at a high level <now> that would enable the environmental --

MR. BELL: I think it's more the latter. I think I understand and we understand Andy's point, which is the NRC staff needs enough information to make their decisions both on the safety side and on the environmental side.

The level of detail that's in the ESRP has been there for some time. Maybe it's time to take a hard look, that's a good environmental term, hard look at what that calls for and is there opportunity to adjust that based on long experience.

You've looked at a lot of these now. And mindful of what is available and mindful of what is practical and what kind of information is available.

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MR. CLAYTON: The level of detail may come into sharper focus, too, as we consult with other federal and state agencies and when applicants go to state agencies and get permits and stuff, they may drive what that level of detail needs to be.

MR. CUDWORTH: Well, I certainly would agree. But, again, that sort of relates to what we talked about last week. Does the staff really need to start de novo review with every one of these plants or shouldn't they be able to rely somewhat on past experience, knowledge? They almost don't need to know where the intake structure is, they know what intake structure impacts are.

You know, there are a lot of things -- well, sort of. You can rely on some degree on your experience and your knowledge, your professional judgment. And it's based on a whole lot of experience. And many times at the same locations their applicants are proposing a new unit.

So if the information is not available and you can address it some other way that EPA really does embrace using your professional judgment, maybe the detail that's in [NUREG-]1555 isn't exactly what you have to have to do a credible

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analysis.

MR. KUGLER: I think I understand what everybody's saying. I will say that often times it gets really complicated trying to determine what you have to have to complete your analysis. And it's not going to be the same everywhere. But a couple of things I want to mention, and I'll give a concrete example.

One is we talked about the intake structure, we talked about the screens. If you open up the screen mesh to a larger size, you can reduce impingement. Good. Unfortunately, at the same time you also increase entrainment, not so good.

So I mean sometimes you've got competing factors you've got to deal with. And so sometimes we're asking for the level of detail because, gosh, I mean you know depending on what you end up choosing it affects multiple analyses in different ways.

Similarly, a lot of the analyses are linked, like the hydrological analyses is often linked to the aquatic analysis. I mean, they're closely linked. And so, you know, you need to understand enough about the design to be able to

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bridge between those. So that's one aspect I think we need to think about.

I mean, I'm not averse to the concept of thinking about what we might be able to consider in terms of well maybe we don't need that information.

And I know, you know we talked as we were working on the revisions we asked the reviewers to look for things like that. Is there information we're asking for that we don't need?

We didn't see a lot come back where they said, no, we don't need that. There were some places where they did.

Now some of that, I think Russ may have referenced this, is you know we're used to doing it this way so it's comfortable to stay there and it's uncomfortable to go somewhere else. So that may be a factor that we have to think about. But by in large, I mean what we're going to stay focused on is we have to do the independent assessment and we've got to have enough information that we feel comfortable that we have done an independent review of what the impacts are and can face a hearing board and defend that, and can face a court if need be and defend that.

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So I mean that's kind of the viewpoint I think the staff is coming from. Because we're looking all the way to the end of the process and wanting to make sure that when the time comes we can defend what we've done. And, you know, that it would be hard for somebody to argue that we haven't done what we had to do to satisfy the basic requirements.

Okay.

MR. BELL: Well, as a longer term matter, I mean I'd be more than happy to put that in a different bin than the comments you're trying to settle on this current update of 1555. But certainly an area that I think would warrant some follow up.

MR. CUDWORTH: Did you have some others?

MR. KUGLER: Oh, yes. We're not out of others yet. Other others.

Let's see. There were a couple of comments related to how we work with -- and this aquatic ecology or terrestrial ecology, the state's issues of concern. And one of the comments we agreed with, and that was state species should not be included in the biological assessment. I think

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that somewhere we had written something and it was written in error that those species would be included in a biological assessment.

The biological assessment is specifically to deal with the requirements of the Endangered Species Act. So state species, per se, do not come into that.

But one of the comments indicated that we shouldn't even talk about the state species of concern in the EIS at all. And we disagree with that comment. Because the environmental impact statement is our evaluation of what the impacts are of this proposed action. And it doesn't have to be impacts just to federal species. It can be impacts to other species. So, you know, state species of concern, it's a situation where the state has determined that some species, maybe within just the state boundaries, is threatened or endangered. And maybe it's not threatened and endangered elsewhere in the country, and so it's not on the federal list. But it is still an impact within that state boundary. And so we believe we still need to address those impacts in the environmental impact statement, but we would not include them under the endangered

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species portion of the review. So that would be our plan for that.

Is there any --

MR. CUDWORTH: Yes. I've had a lot of experience with these kinds of lists, as your folks probably do also. I would agree you have to do environmental impacts over and above just what are T&E species, state or federal protected. But I would not accord these special status species to anything more than the deer and the turkey and the other things that are not on those lists. Those lists range from something that's only half a step from being listed down to things that nobody really knows who put those names on the list. I really question even sometimes calling them state lists because they're run by a natural heritage organization that really doesn't have any state oversight.

I would just prefer leaving that term out. That's not to say you don't have to be concerned about impacts to these other species over and above, but they don't rise to the level of some special concern like state or federally protected species.

MR. KUGLER: Okay. We can take a look

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at that. I mean, I'm not sure we're far apart in what we're saying. I think we're fairly close.

MR. CUDWORTH: Well, from a practical standpoint I can send a biologist out to look for threatened and endangered species. And that will be they will look at the state list, narrow it down to maybe there are 24, maybe there's 50 species that they have to look at. But if I have to send a biologist out to look for these lists, there are 400, 500, 600 species they've got to look for. And that is a significant difference.

MR. KUGLER: Okay. I understand that. Okay.

Somebody just showing up on the phone. Who was that?

MR. RAMSDELL: Van Ramsdell, PNNL.

MR. KUGLER: Hey, Van, this is Andy.

We're done with your section.

MR. POSLUSNY: Yes, good job. Good job.

MR. KUGLER: Good job.

MR. RAMSDELL: You're done with my section?

MR. KUGLER: Yes.

MR. RAMSDELL: Okay. I'm gone.

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MR. KUGLER: All right. Thank you, Van.

Sorry.

Okay. Let's see, we're getting kind of now into some of the lesser comments.

There were a few comments related to the acceptance criteria, and maybe lesser isn't the right way to put it. But maybe comments to which I have less specific answers would be a better way to put it.

The staff does feel that the comments point to an issue within the environmental standard review plan. There is kind of a hodgepodge of different things that are under acceptance criteria. The question basically was do they all belong there, is it the right place for them, is it the right approach. And we are going to take a look at that.

We've discussed whether maybe we change the name of that section, but that creates problems because it's structured after the safety's standard review plan. So I don't know if we'll go down that route or if we'll just take a harder look at what is included there. And maybe up in the front section in the Introduction if we are going to include things that are nontraditional compared to the safety

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review plan, standard review plan, explain that and just make that more clear.

But I think we understand the comment and we do see that there's a need to work on that area.

MR. CUDWORTH: A couple of things. This is becoming more and more important with the acceptance checklist that's now out for maybe use that really sort of makes it as a make-or-break on an application. Where have you complied with some of these things that are in this list that probably don't belong on that list?

MR. KUGLER: Okay.

MR. BELL: Did your shop contribute that acceptance review checklist to the new office instruction?

MR. KUGLER: We did the environmental portion, yes.

MR. BELL: Yes. Yes.

MR. KUGLER: And it was basically derived from the ESRP.

MR. BELL: Absolutely. That's what I would expect. If the troops perceived inconsistency between that checklist and the ESRP, is that

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something that you would like to know about? It's not exactly out for comment or anything, but you know we're not bashful if we see something.

MR. KUGLER: No, I would think so. Yes. If you see something that looks inconsistent to you in that regard, we would be interested in hearing about that.

MR. CLAYTON: And I would just like to say, too, that that checklist is not a go or no-go.

If there's a few things that aren't provided in the application of that checklist, that probably means we'll send an early RAI at the time we do the acceptance review, unless it's some really significant issue. So don't think that every item on there is required for us to accept an application, especially at this point in the game when we just issued the new ESRP and we don't expect people to have built their reports to that standard yet.

MR. CUDWORTH: Well, I'd appreciate that. But my clients aren't going to tell me I can skip over that thing on the checklist because we can wait for an RAI. So it does become a make or break in --

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MR. CLAYTON: And, you know, that checklist, one thing that when we were doing these new acceptance and technical sufficiency reviews I say those things aren't necessarily make or break as far as accepting the application. It could impact the schedule, though. Because part of that technical sufficiency review is for us to be better educated on how long it's going to take us to do the reviews.

So if we have to build in an extra round of RAIs because some information isn't there, that may extend the schedule. We'd like not to do that. So the more of that that you can provide, the better.

MR. BELL: Andy, I have one for you. You mentioned the EPP, environmental protection plan.

MR. KUGLER: Yes.

MR. BELL: That's something the NRC produces, but has requested the applicants to provide a draft in our COLAs, and I believe that is happening.

MR. KUGLER: Okay.

MR. BELL: The interest is in understanding how the process from moving from that draft that something -- I don't know when they would see that for real, and having an opportunity to

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interact, perhaps on that. Particularly, you know, on the first one since I would imagine it's going to set certain precedents.

MR. KUGLER: That's a good question. I don't think I'd really thought about that aspect of it.

I mean in theory it could be that you don't see it again until we --

MR. BELL: Exactly.

MR. KUGLER: -- draft a permit or license. And I could see where you would have concerns about that.

MR. BELL: Exactly.

MR. KUGLER: Well, what I'm going to say is there are certain basic features I think we would expect to be in the plan. And I referenced the Grand Gulf, I think it was Grand Gulf, Waterford and River Bend we revised all at once in, I think it was in 2003. And there are some things within one or two of those plans that are non-standard. There are some things that were site specific. But the basic components are in there, the things we would expect to see in a minimum environmental protection plan.

And those parts of it, you know, I would

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expect that once we get everybody on the same page, you guys propose the right words and we approve those same words because they're going to be the same from one site to another.

What I think is more open to discussion in between is, are there other things that should be in the environmental protection plan. And what I'll do is I'll give you an example.

I don't know how many people know the history, but this is what used to be the environmental tech specs in the old days. Okay. Well, what kind of things went into there? Well, it could be a monitoring program. You've got a cooling tower. We think the impacts from the cooling tower drift are going to be sort of like this, but we've got enough uncertainty we want you to monitor it for a few years and give us the results. And so that went into the environmental tech specs, would have been now the environmental protection plan.

So post-construction or post-operation monitoring programs is something we should all be thinking about. Is there something related to this plant that should become a license condition? And if so, basically what I'm saying is environmental

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license conditions would probably all go into the EPP, or at least if it's of that nature. You know, if there's going to be a monitoring program or something like that. And then eventually, you know once you complete the monitoring program, then that portion of it can be deleted.

I don't think we've really had discussions about that. I don't know that anybody else has thought much about it. I think that's something we do need to start thinking about as we go about licensing these plants. Because there will be things -- there have to be some things that come up that, gee, you know it would really be a good idea if we check on this, you know, post-completion of construction to see if the actual impacts are as they should be.

Another example one of the three Entergy plants, and I can't remember which one, had a cultural resources protection plan. And the reason was they had some pretty specific cultural resources on site, and this was a mechanism to make sure that those resources were monitored and protected over the life of the plant. Somebody didn't inadvertently, you know, do something to destroy

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those resources.

A lot of times the SHPO, the state historic preservation officer, wants the NRC to enter into a programmatic agreement with them to protect resources. And it's rather a challenging issue for us because we can't directly protect the resources. We're not there. And I suspect that that cultural resources protection plan was an approach to satisfying the concern of the state historic preservation officer that the resources would be protected and that we had a hook to make sure that that happened.

So those are some things I think we need to be thinking about in terms of environmental protection plan as we go forward. But it's a good question: How do we get there between?

MR. CLAYTON: And I certainly would be disappointed if there were any surprises at the time we issued the permit or license through the site audit and the RAI process. I would certainly hope that there wouldn't be. It's my expectation that there won't be any surprises.

MR. BELL: Can I put you down for agreeing that that would be a worthy topic of

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discussion? It may not be the right time. Maybe it's as the EIS it gets farther along there's a better understanding of what needs to go in the EPP. And then we could track that item and some follow.

MR. CLAYTON: Yes.

MR. CUDWORTH: And I think along with what should be in the EPP it would help me to understand where NRC's coming from insofar as their authority. By what authority, what legal responsibilities are they trying to satisfy by having this information in the EPP. It's not always clear to me. In fact, that's what happened to the tech specs. It really fell apart at the Yellow Creek decision when the ASLB decided they didn't have authority over, at least the EPA water stuff.

MR. KUGLER: Right.

MR. CUDWORTH: So if as you say, River Bend has this set of unreviewed environmental questions, and I guess I've seen the acronym UEQ. That can't be a NEPA requirement, but where's that coming from? Help me find out what I'm satisfying there, I guess.

MR. KUGLER: Okay. Well, there's a brilliant write up in the amendment, a really smart

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guy wrote it. So --

MR. CUDWORTH: The amendment to what?

MR. KUGLER: The 2003 amendment for the Entergy plants.

We did work through this in a lot of detail at that time. Because actually the original request from Entergy was to remove the environmental protection plan completely, as other plants had done.

How to put this without it sounding really bad? The plants that removed the environmental protection plans did so during a period of time when there was no environmental group. And so, you know, basically the amendment came in and the project manager was asked well are there any safety implications if they take this out. No. Okay. But when we got involved, and the Entergy amendment was the first one where we did get involved after that, we said well hang on a second now. These weren't put in there for safety reasons. They were put in there for a very different reason.

And we did take a lot of the EPP out because a lot of it really did not make sense. It didn't have any connection to what we're responsible for. But there are some things that we remain responsible for even

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after we issue our EIS.

We are responsible for Historic Preservation Act. That's on the federal agency.

We are responsible for Endangered Species Act. That's actually technically on us as well. So far, despite some errors, we've not gotten fined for some things that have gone on related to Endangered Species.

So there are some things we remain responsible for. And what we tried to do was craft an environmental protection plan that would protect us from making mistakes or missing things that we needed to know about, but not put a significant burden on the applicant. Because typically what most plants have done is they've incorporated the environmental UEQ review into the 50.59 portion of their procedures. So, you know, when they do their 50.59 they also go off and do this other related review, and they are similar in some structure. So it's not too bad for them to do it. And in most cases most of the things the plants want to do, anything inside the power block just about you can do without having much difficulty satisfying those requirements.

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Now when you do a power uprate, but of course when you're doing power uprate you come in for amendment anyway.

You know, there are certain things that would trip the requirements to talk to us, but a lot of them would have tripped you to amendment anyway.

MR. MAHER: Bill Maher.

Just the way, if you want to fall back on that and I know we're going to discuss it later, but a lot of the early EPPs essentially I'm paraphrasing here was comply with state law. So I wouldn't really expect that. But we would only really expect something that is thoroughly within NRC purview and for compliance.

MR. KUGLER: Right. And that was our goal. And, you know, if you look at those kind of baseline or basic environmental protection plans, because those plants were long past doing the post-construction things. So they pretty much took them down to the minimum. And, you know, take a look at those. And if you guys feel that there are things that we need to discuss in that regard, we can do that.

I think this is an overall issue that

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we're going to have to have some meetings on.

Okay. Let's see. We got mixed comments from industry, believe it or not, on Regulatory Guide 4.2.

MR. CUDWORTH: I was just looking at that.

MR. KUGLER: Yes. Some of you guys want us to keep it and some of you guys want us to get rid of it.

Right now our plan is to go ahead and update it. And the reason right now more than anything is we're really not set up in a way that we can have one document that serves both communities, both the industry and the reviewers. I don't know if we could get to one.

What we are doing is, first of all, right now we're primarily focusing on the ESRP and trying to get that done.

We've already started talking about when we go to revise the reg guide to see if we can find some way to link them so that when we change something in one, we're not having to change both. And the preference would be that maybe there would be more guidance in the ESRP, which is easier to

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change, and that the regulatory guide would reference that guidance in the ESRP. I mean, that's a thought we're considering. It hasn't gotten very far yet. But it's something we're at least thinking about. Because, among other things, that would help make it a lot easier to keep them consistent. Because regulatory guides are a lot harder to modify.

So I think we understand the basis for the comment remove it. You know, there would be a lot of duplication between the two. On the other hand, we want to make sure that applicants do understand what it is we expect of them. And the ESRP covers a lot of things beyond that.

So we are looking at ways we can satisfy both. And so we're working towards that. But I can't tell you we've got a plan yet. We're working on ideas.

MR. BELL: Well, we planted that seed at a workshop like this one last week. I characterize that as a bigger idea and one I think you wrote down and you're taking away. I appreciate your initial take on that, as you just described.

And maybe 4.2 continues on, as you say,

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as some sort of -- but it points you to 1555 where the guidance is needed and it's in one place. Then the question is does 1555 need to be augmented to serve that, or does additional information go into 4.2. But then you're back to two documents.

So, yes, I noticed an early comment was to update 4.2, and we kind of countermanded that last week and we're more along the lines with Jon's comment to you, that questioning the need for 4.2 at least as we have known it. And maybe that's where to leave it for now.

I know in terms of bigger ideas, Jim Lyons said that in March there would be a report as a follow up to last week's workshop. And I think this would come up there and presumably some action associated with that.

MR. CLAYTON: It would be a huge paradigm shift for the Agency, but maybe across the board we could combine reg guides and environmental standard review plans into a single document instead of having one for the staff and one for the licensees.

MR. BELL: And the Environmental Review Branch could lead the Agency in that direction.

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MR. KUGLER: Well, I will tell you that I think the only challenge -- I mean, conceptually I think that's okay. I mean, I'd rather have one document than two. I think the biggest challenge I see beyond the institutional challenges would be there are some things that the applicants need that we don't. And there are probably some things that we need that you don't. But that doesn't mean you can't do it in one document. You may just have some sections that are specific to one or the other and then the rest of it is generic to everybody. I mean, it could be done.

So you know I think we're trying to think of ways to work with that. And, obviously, you know the method that gets everybody what they need with the minimal amount of effort would be preferable for all of us.

MR. BELL: Maybe it's viewed as a pilot effort and along those lines. It's an interesting choice, because it doesn't affect the safety side. It's separatable. It's separate from that.

I appreciate your consideration on that.

MR. CLAYTON: Well, it might be a great thing to do. I'm not sure that I'm willing to take

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on the workload of moving the Agency at the same time we're reviewing 28 applications.

MR. BELL: We'll be right there with you.

MR. CUDWORTH: But along that line, we'd rather you have your people reviewing the applications than working on 4.2.

MR. KUGLER: Yes, I understand that.

Okay. There was a comment that asked for changes to the introduction related to scaling the depth of review based on the significance of the impact. And, actually, the introduction already talks about that. It's got that guidance in there.

I think the real issue is, and maybe the person who wrote the comment was too polite to say it, how well we're implementing that approach. And it is something I think we need to take a hard look at.

What I'll tell you is that maybe sometimes the volume of the document is misleading in terms of how much effort we put into various issues.

I know Jon earlier talked about the potential for some issues to be dealt with

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generically. And what I will say is I think it's really hard to get there for new plants. Because you don't know where they're going to go. You don't know what unique situation may exist where these people want to put their plant. But what we do typically do in our reviews is for a lot of issues we know they're not generally an issue at any plant. So we go and we look. And if we don't find anything unusual, we go back to the last EIS we wrote and we bring that forward. We don't start from scratch. But we do look to make sure that the work we're doing is, in fact, representative of what the impacts would be at that location.

So I think for the most part I have a real hard time with the concept of a generic environmental impact statement for new reactors. I can't bring myself to accept that there will never be a situation where it's going to be different.

Now, I guess if we take the license renewal model, even for the Cat 1s, we didn't say it would never go out of bounds. We just said generally this is, as far as we can tell, this is everybody. And we always go and look. You know, you'd have to have a new and significant process,

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which everybody loves, because it's so easy to define it.

So, I mean, I guess it could be done. It's something we can look at. But, again, this is one of those things that if we wanted to go down that road, it's going to take resources to go down that road. And we currently I think expend pretty minimal resources on a lot of those issues. Because we recognize that they're not likely to be different from one site to another, so we just look and then adopt what we've done before.

MR. CUDWORTH: I would say that sometimes it's difficult to see that that screening might be done. We see RAIs that are right out of NUREG-1555 and just don't really make any sense for a particular plant. And sometimes I wonder if your reviewers have that introductory text in one hand while they're looking at the rest of the specific plan they're worried about, whether that introductory text is just lost.

MR. CLAYTON: At our meeting last week on the 6th we did ask people to send us suggestions of sections they thought would be appropriate for generic treatment. So after we get those ideas,

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we'll consider them.

MR. BELL: Yes. I think we would probably put those in a letter back to you that we talked about in our January --

MR. CUDWORTH: Next year.

MR. BELL: Yes.

MR. KUGLER: But I do think from my perspective what I've taken away from this at a minimum is we do need to make sure all our reviewers understand that concept.

It's not clear that we've been applying it as well as we could. So I think we do need to go back and look at that and make sure all of our reviewers understand that.

MR. CUDWORTH: And it's tough on our side, too, telling our people how to make that cut, whether they're significant or not.

MR. KUGLER: Okay.

MR. BELL: And that came up also last week, I think too, in a sense -- and it's us, too. But training on NEPA.

MR. KUGLER: Yes.

MR. BELL: And what the scope and what the intent is and what's too much.

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MR. KUGLER: Right. Okay. All right.

That group was all the comments I had planned to cover under other. There were a pile of things under there, but those were the most significant. A lot of the others we'd agreed with, and even among the ones we didn't necessarily agree with, they seemed pretty minor in nature. So I didn't intend to discuss them in detail.

If there are issues that were among the comments that we haven't covered that you wanted to talk about, we could talk about those now.

MR. BELL: I had one.

MR. KUGLER: Okay.

MR. BELL: So far. New and significant, which you just mentioned, we struggled with that what does new and significant mean. I think we're the better for it. This largely was discussed in the Part 52 rulemaking and the statements of consideration. And, in fact, we thought there was some language there that would be helpful in the ESRP. So that was one comment I'm talking about.

The Commission stated in the SOC that for an issue to be significant it must be material to the issue being considered, that is it must have

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the potential to affect the findings or conclusions of the NRC staff's evaluation of it. Affect the finding or conclusions of the staff's evaluation of the issue.

Again, not very specific or satisfying to everybody, but helpful. And right now only in the SOC and the comment. We would like it to live on in the ESRP.

We think more might be necessary, and we've been after a definition of what significant means. And we suggested one. And we've suggested this before. There's three significance levels; small, moderate and large. And that for information to be significant it would have to cause whatever the environmental impact is to change from a small to moderate or moderate to large. This would be a very concrete definition of significant, something well understood and implemented throughout. And so we have suggested that be added. And it relates to something you mentioned earlier, and the new term I have, what is it? UEQ, unreviewed environmental question. Because one of your criteria were no significant adverse change in environmental impact.

Well, that begs the question --

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MR. KUGLER: What's significant.

MR. BELL: And this kind of a straightforward definition of that would be helpful.

MR. KUGLER: Well, and I can guarantee -

MR. CLAYTON: I would have to consult the OGC, but I think the statement of considerations it talks about the potential for making a change and the conclusions with it. It had a potential to go from small to large or to medium or medium to large.

MR. BELL: But the potential is here, and if I didn't verbalize it, you're correct.

MR. KUGLER: And we struggled when we were working on Regulatory Guide 1.206 we struggled with trying to come up with a way to say okay, what does "potential to effect" mean. And I think we came up with some words. I don't think they made it in the final cut. We have discussed it in one of the DCWG meetings.

I know one of the approaches we talked about was if you can't just look at it and say obviously it doesn't affect it, then it's got the potential to effect it. If you've got to do analyses to determine whether or not it affects it,

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then it's got the potential. That was one approach.

Because, again, coming up with concrete definitions of these things is difficult.

I can tell you that when the EPPs were written they weren't considering small, moderate, large. So I mean I don't think we can necessarily use the same definition in that application where we'd have to at least take a look at it and make sure it made sense.

MR. BELL: Well setting that aside a minute.

MR. KUGLER: Yes.

MR. BELL: We think what we know what a new issue is. And we think what small, moderate and large means. And that that would cover the significant part of new and significant. And so our comment is to include that kind of language in the ESRP.

We have made the comment before. And, honestly, I don't recall ever getting a response, a specific response to it. Is it something that you're considering doing? I don't see it on the list of yeses that you provided yesterday.

MR. KUGLER: Well, I think we're not

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convinced that that's the right level.

MR. BELL: It does move the issue that it put the potential. But maybe we're a little closer.

MR. KUGLER: Yes. Well, the thing is that--

MR. BIGGINS: Andy, I think part of the problem is, and maybe this is part of the problem that you're identifying as well in regards to trying to comply with following new and significant, is that I would categorize it as a historical definition. In other words, it's developed over time. And maybe even evolving in the way we look at it.

I think the explanation in the statement of consideration is a good description of how we view it today. I mean, I didn't work on Part 52 myself, but it's possible that it wasn't specifically included as a rule at that time of the rulemaking and was put in the statement of consideration because it could be so difficult to define.

And if we accept a definition and put a definition in the ESRP, the danger is that we limit

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to an extent that we are excluding something from a term that has evolved over time that really should be within the definition. And so I think the problem with putting it in the ESRP is placing a limitation on ourselves that we don't really intend. And really won't advance the meaning beyond how the statement of consideration really describes it.

MR. CLAYTON: And we'll be getting some real world experience on North Ana and Grand Gulf soon on how the whole thing goes back. And we may go back to rulemaking to try to better design it or we may get some guidance in the ESRP. But as we learn lessons from our actual reviews, we can look at that down the road.

MR. CUDWORTH: One thing you might consider is whether part of your difficulty is because you're trying to create a new wheel. I've equated this kind of thinking to the thinking that agencies have to go through to decide whether they have to supplement an EIS. And if you go the route of using that criteria as your new and significant criteria and you have the advantage of a great body of core court decisions on how you go about deciding whether something has risen to the extent that you

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have to supplement the EIS. It's significant enough to supplement. And so you might reach out to that intelligence to somewhat in apply this new and significant tests.

MR. KUGLER: Just off the top of my head the first thought that comes to mind is whereas in looking at a combined license, say, that references an early site permit, we're looking at whether information related to an issue is new and significant, the determination whether to write a supplement is, I think, at kind of a higher level. Are there changes in the project as whole that are so big that you need to write a supplement.

So I don't know if you'd really be measuring the same thing or something that's on a bigger scale. I mean, I understand the concept you're proposing. I'd have to think about it. But my initial reaction would be you're talking something on a bigger scale when you're talking about something that would force you to writing a supplement to an EIS.

MR. CUDWORTH: Yes. So I'm not suggesting you limit your new and significant to that high level. I do agree it has to be at a lower

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level, but the various concepts, the thought process you go through may still apply well here.

MR. KUGLER: Okay.

MR. CLAYTON: On their way out the door, I'd like to say thanks to our two panel members who had to leave early.

MS. CERAFICI: You are welcome.

MR. CLAYTON: Thank you.

MR. BELL: They had some travel arrangements that they absolutely want to make.

MR. KUGLER: Okay. Anything else that we didn't cover that you all wanted to cover?

MR. BELL: I thought you had a pretty good list of other issues. It covered all but the one of mine.

MR. CUDWORTH: We came with a couple of others, but they cropped up.

MR. BELL: Exactly. Yes.

MR. KUGLER: Yes. Is there anybody in the audience has any other issues related to the comments that we need to discuss?

Okay. I think we got through everything. And we even did it ahead of schedule.

All right. Well, first of all, I want

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to thank everybody who came out, even the people who left. But I appreciate all the effort that went into getting here, especially for Jon. I certainly appreciate that.

We did cover a lot of ground and we, obviously, have a fair bit of work to do still. We'll take back what we've talked about today. We will have a transcript of this meeting. We'll put together a meeting summary.

I'm going to have to look into something Russ was asking me about during the break. He was asking whether or not we'd be able to provide the table that has the comments with which we didn't fully agree and our responses to them. What I told him is if we can have it ready in time, we'll put it with the meeting summary. Otherwise, it would have to come sometime after that.

We'll work on developing the revised sections. We'll take a look at the question Russ had about making draft finals available prior to making them final finals.

And, you know, of course there are some issues we've listed that we want to follow up either internally or with you. And even once we issue the

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section's final, as we've talked about, there's some expectation that we'll still find things that we didn't think of or we didn't understand it and we'll have further revisions to make as we gain experience with those.

Unless anybody has any --

MR. CLAYTON: Still working on the moderates?

MR. KUGLER: We are working on the moderates as time permits. But these are going to take priority over them for a while, I think. So work on those will probably slow or stop.

MR. BELL: A couple of the follow up areas. One was April's on the countywide versus macro-route approach. I have a note on that, but I can't recall, was there an action?

MR. KUGLER: Yes, that was for us to consider as we work on the revision whether countywide would be a viable option.

MR. BELL: As part of the revision.

MR. KUGLER: Yes.

MR. BELL: Proprietary information was kind of a difficult one --

MR. KUGLER: Yes, I think we have to

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have some sort of a separate discussion we set up. It's going to involve different people. I mean, there's folks in OGC who that's their specialty area.

My suggestion on that would be we need to come up with a meeting that involves a range of different type of industry people. In other words, certainly people who have merchant plants, because they're probably -- they've got the toughest road on this. But a few different industry people and the right people in Office of General Counsel to figure out what the concerns are, go over what the rule does and does not allow and what the implications are. And then figure out coming out of that what the implications are in terms of the information that's submitted.

I'm not sure how to go about getting that one set up. You want to take the lead on that, Jim?

MR. BIGGINS: I'm not sure either who our expert would be on that. But that -- you know, you'd have to talk to somebody else in OGC. It's beyond my expertise.

MR. KUGLER: Okay. Well, I guess I'll

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take that as an action item to find out the right people and see if we can start thinking about a way to get together with you all on it.

MR. BELL: Longer term, a new look at the level of detail that's really needed for the intake structure design, for example.

And on EPP, an interaction on that as your thoughts ripen on that and we get closer to EIS.

I think that's all those.

I'll tell you, I took an action and I'll invite the troops to if they see inconsistencies or feel there might be inconsistencies between that acceptance review checklist and the ESRP as we see it today, I think we would be interested in that. And we'll pass that along.

MR. KUGLER: And I'm trying to recall on that issue in particular I don't remember the relative timing of the development of the office instruction versus the issuance of the revisions. So some of the differences could be because we've revised the ESRP and the OI, the office instruction hasn't caught up with it yet.

MR. BELL: It's close.

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MR. KUGLER: But that's something that we should be monitoring at any rate. If we do change the environmental standard review plan, then we should be looking back at the office instruction to make sure we keep it in step.

MR. CLAYTON: Yes. We were developing that checklist before the concept of an office instruction came about. And it was coincident with the same time we were revising the ESRP. So there may be some things that are slightly out of step there. And when we decided to issue an office instruction, we were way ahead of the other side of the house because we had been working on this for a year or more.

MR. BELL: If we ask the safety side guys, they have their own checklist. Your comments about the environmental side was, you know, if it's one or two or three of these things and they're not the really significant ones, we're going to accept the application. We might ask you an early RAI.

I'm not sure the safety side guys view it the same or would say the same thing. But I can ask them myself. But that goes to Jon's point about, you know, it's in the office instruction. It sure

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looks like checklist on a safety side. And it sure looks like a checklist. And by golly, that must mean I need all those things. So this isn't a meeting about the checklist, but if there's that flavor that could be put into it in an introductory sense, you know, on a case basis some of these items may follow the initial application or something.

MR. CLAYTON: Well I think if you look at the South Texas case and went through the safety checklist, there's almost certainly some things that weren't checked off in there as being complete, but we still docketed it. I'm sure they look at it the same way.

MR. KUGLER: In addition, I'm trying to remember exactly what the form looks like because I haven't used it myself. But I know as we've talked about some things today there are some aspects of what's in the environmental standard review plan that may not always apply to every site. And I think the form is set up in such a way that we can document that. And if a certain aspect is not applicable to this particular application, then we just note that and it shouldn't be a problem.

The only time it becomes an issue is if

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we believe it is applicable and it's not in there or it's not as complete as we think it should be. But no one item -- I would think certainly on the environmental side, and I'd even be a little hard pressed on the safety side to think that any one item all by itself could say that's it, it's unacceptable.

I would think it would generally be a situation where there are multiple items and there are enough that it says, you know, this just isn't good enough to just start with. Because typically any one issue -- well, we can ask RAIs and we can get that.

MR. BELL: Well, typically it's a level of detail issue. If something's missing and it's required by regulation to be there, I think it has -- you're going to get it. But once you get it there may still be level of detail issues. And our view is those become RAI kinds of things.

Okay. Very good.

On behalf of the panel and the industry --did you have something more, Jon? All right. Well then I'll --

MR. CUDWORTH: I have in my notes that

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there were really three places that they were going to ask for input or comments. One is site selection, if we had any comments or suggestions of wording.

The other was the less significant issues, and then we talked about the inconsistencies.

Are there any other typical areas that you'd really be interested in input from us on wording?

MR. KUGLER: We've covered so much today. I don't know if I could come back to it.

MR. BELL: What are the less significant? What was your second one?

MR. CUDWORTH: The less significant issues or generic issues, we sort of talked about it. The third was the inconsistencies between reg guide to reg and the checklist.

MR. CLAYTON: Yes, the second was things that we could do generic that you asked for.

MR. CUDWORTH: Correct.

MR. CLAYTON: Or generic use.

MR. BELL: Apart from follow up from this workshop, we'll provide you that follow up from the last one.

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MR. CLAYTON: The last one, yes.

MR. BELL: Yes.

MR. KUGLER: What was the first one on your list?

MR. CUDWORTH: The site selection process.

MR. KUGLER: The site selection process. Okay.

MR. CUDWORTH: And the last question I had, I know you've talked before about the Agency may be trending toward following the actual format here in introducing EISs. Is that --

MR. KUGLER: Yes. It's our plan to build our environmental impact statement on the format of the ESRP. Honestly, I'm trying to remember what our reasoning was on the early site permits for deviating from it. There was some reason we did it.

I think if I talk to the right people, they would remember exactly why we did it. But at this point it makes much more sense to just stay with the same format. It will match up with the format of the environmental report. It'll make it easier for everybody.

So, that is our plan is to follow the

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same format.

MR. BELL: Will that be true even, say, North Anna, that was EIS on the ESP was in the old EIS format? You'd expect to --

MR. CLAYTON: I expect we'll do it in the ESRP format. That's the way they submitted their ER, so it'll be easier for us.

MR. KUGLER: Yes. I think what we'd end up having to do is we'll have to do some sort of an explanation where we end up being different in the combined license environmental impact statement from the ESP environmental impact statement. But I believe that is our intent, even in that one, is to follow the ESRP format. It makes too much sense not to do it.

MR. CLAYTON: We may as well start out and be consistent for a change.

MR. BELL: Yes. I think that would be progress. We would support that.

Listen, I started to say a minute ago I wanted to just thank you for the opportunity and for the work you're putting in. And I appreciate your openness to some of the suggestions we're making.

We can provide you a little more input

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on this, and then we have some longer term things to keep working on.

Again, as we said last week, I think the environmental review area is one that it hasn't perhaps been looked at in a long time, and maybe there are some ways to do it smarter and more efficient, more effective.

MR. CLAYTON: I'd like to thank all the people in the audience, both the staff and the industry and any members of the public that are here that gave up their afternoon to come and support this meeting. I think it was important that we get this guidance in better shape, it'll save resources for the us and save resources for the industry and end up with a good quality environmental impact statements.

MR. KUGLER: Okay. Thank you. We will close the meeting.

Thank you.

(Whereupon, at 4:30 p.m. the meeting was adjourned.)

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