1		BEFORE THE
2	FLORIDA	PUBLIC SERVICE COMMISSION
3	In the Matter of:	DOCKET NO. 090009-EI
4	NUCLEAR COST RECO	VERY CLAUSE.
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6		
7		
8		VOLUME 8
9		Pages 1321 through 1439
10		VERSIONS OF THIS TRANSCRIPT ARE
11	THE OFFIC	ENIENCE COPY ONLY AND ARE NOT CIAL TRANSCRIPT OF THE HEARING,
12	THE .PDF VE	RSION INCLUDES PREFILED TESTIMONY.
13	PROCEEDINGS:	HEARING
14	COMMISSIONERS	CHATDMAN MARRHEN M. CADRED II
15	PARTICIPATING:	CHAIRMAN MATTHEW M. CARTER, II COMMISSIONER LISA POLAK EDGAR COMMISSIONER KATRINA J. McMURRIAN
16		COMMISSIONER KAIRINA J. MCMORRIAN COMMISSIONER NANCY ARGENZIANO COMMISSIONER NATHAN A. SKOP
17	DAME.	Wednesday, September 9, 2009
18	DATE:	Commenced at 9:30 a.m.
19	TIME:	
20	PLACE:	Betty Easley Conference Center Room 148
21		4075 Esplanade Way Tallahassee, Florida
22	REPORTED BY:	JANE FAUROT, RPR
23		Official FPSC Reporter (850) 413-6732
24	PARTICIPATING:	(As heretofore noted.)
25		

DOCUMENT NUMBER-DATE

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1	PROCEEDINGS
2	(Transcript follows in sequence from
. 3	Volume 7.)
4	CHAIRMAN CARTER: Okay. We are back on the
5	record. And when we last left I think, Mr. Brew, you
6	were ready for cross-examination, or Mr. Rehwinkel.
7	MR. BREW: Yes, sir. But Mr. Rehwinkel is not
8	done.
9	CHAIRMAN CARTER: Oh, you weren't?
10	(Laughter.)
11	MR. REHWINKEL: I have a few more questions.
12	We have another set of
13	CHAIRMAN CARTER: No more breaks for you.
14	You're recognized, Mr. Rehwinkel.
15	MR. REHWINKEL: Thank you.
16	Despite Mr. Young's admonition, Mr. Kelly
17	bought me a caffeinated coffee.
18	CHAIRMAN CARTER: You know, he did that on
19	purpose.
20	MR. REHWINKEL: Which I asked him to do.
21	Mr. Chairman, we have passed out another set
22	of documents that we would like to like we did last
23	time is identify them for cross-examination purposes in
24	a batch, or we can do it each time we approach the
25	witness with them.

1	CHAIRMAN CARTER: Okay.
2	MR. REHWINKEL: It's your pleasure.
3	CHAIRMAN CARTER: Well, let's do the batch
4	deal. Let's go for a batch. We're speaking computer
5	terminology.
6	MR. BURNETT: Mr. Chair.
7	CHAIRMAN CARTER: Yes, sir, Mr. Burnett.
8	MR. BURNETT: I'm sorry, sir. May I just get
9	a copy of those?
10	MR. REHWINKEL: I apologize. I'm sorry.
11	CHAIRMAN CARTER: Okay.
12	MR. REHWINKEL: I made the absolute minimum I
13	could because I wanted to minimize. I apologize.
14	The first document
15	CHAIRMAN CARTER: That would be Number 147.
16	MR. REHWINKEL: Okay. And it is entitled JVT
17	3/2008 Monthly Report Excerpts.
18	CHAIRMAN CARTER: JET?
19	MR. REHWINKEL: JVT.
20	CHAIRMAN CARTER: Oh, JVT 3?
21	MR. REHWINKEL: Yes, 3/2008, March 2008
22	Monthly Report Excerpts.
23	CHAIRMAN CARTER: Okay.
24	MR. REHWINKEL: And that is a three-page
25	document. The next document is

1	CHAIRMAN CARTER: 148.
2	MR. REHWINKEL: a one-page document, a
3	March 11, 2008, letter to Gary Grant. Not the actor.
4	The next document is a ten-page document.
5	CHAIRMAN CARTER: 149.
6	MR. REHWINKEL: entitled Rizzo/Randazzo.
7	CHAIRMAN CARTER: Is that R-I-Z-Z-O?
8	MR. REHWINKEL: R-I-Z-Z-O/R-A-N-D-A-Z-Z-O.
9	The next document is a 23-page document.
10	CHAIRMAN CARTER: Number 150.
11	MR. REHWINKEL: May 2nd, 2008, letter to Gary
12	Grant.
13	CHAIRMAN CARTER: May 2nd, 2000
L 4	MR. REHWINKEL: 2008 letter to Gary Grant. I
15	think that's enough.
16	CHAIRMAN CARTER: That's a different Gary
L7	Grant letter than before?
L8	MR. REHWINKEL: Yes. This is a May 2nd, 2008,
L9	letter.
20	CHAIRMAN CARTER: Okay.
21	MR. REHWINKEL: The next document
22	CHAIRMAN CARTER: That would be 151.
23	MR. REHWINKEL: is a one-page letter to
24	Jeff Benjamin.
25	CHAIRMAN CARTER: To Jeff Benjamin. Okay.

1	MR. REHWINKEL: The next document is a
2	27-page
3	CHAIRMAN CARTER: 152.
4	MR. REHWINKEL: September 12, 2008,
5	supplemental LWA filing.
6	CHAIRMAN CARTER: Supplemental
7	MR. REHWINKEL: LWA.
8	CHAIRMAN CARTER: LWA.
9	MR. REHWINKEL: Filing.
10	CHAIRMAN CARTER: You know, you could have
11	NWA, the National Wrestling Association. Okay.
12	153 will be the next one. Do you have another
13	one?
14	MR. REHWINKEL: Yes.
15	CHAIRMAN CARTER: That would be 153.
16	MR. REHWINKEL: A five-page SSW/WEC
17	CHAIRMAN CARTER: SSW/WEC.
18	MR. REHWINKEL: 4/2009 Monthly Report
19	Excerpts.
20	CHAIRMAN CARTER: Okay.
21	(Exhibits 147 through 153 marked for
22	identification.)
23	MR. REHWINKEL: And in case anyone perceived
24	it, I passed out two documents that I do not intend to
25	use with this witness, even though the cover sheet says

1	I do. And this is PGM Board of Directors Documents and
2	Link documents.
3	CHAIRMAN CARTER: We don't need them?
4	MR. REHWINKEL: We don't need them. Just in
5	case these were for Mr. Lyash.
6	CHAIRMAN CARTER: Okeydokey. All right, Mr.
7	Rehwinkel.
8	MR. REHWINKEL: Thank you.
9	CONTINUED CROSS EXAMINATION
10	BY MR. REHWINKEL:
11	Q. Before we move on to this set of documents,
12	Mr. Miller, I would like to ask you a question. If you
13	could, turn to Page 13 of the December 2008 NPD Report
14	in 146, Exhibit 146.
15	A. Page 13, December 2008 Performance Report?
16	Q. Yes, sir.
17	A. I'm there.
18	Q. And Section 2.6, risk critical items.
19	A. Yes.
20	Q. Can I ask you if the first bullet point that
21	starts with the word suitability, is that sentence
22	confidential?
23	CHAIRMAN CARTER: I'm sorry, Mr. Rehwinkel,
24	you said Exhibit 146?
25	MR. REHWINKEL: Yes. The NPD Progress NPD

monthly report excerpts.

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CHAIRMAN CARTER: Okay. What page?

MR. REHWINKEL: This would be the next to the last page in the exhibit.

CHAIRMAN CARTER: What's the Bates stamp?

MR. REHWINKEL: It is 47-013526.

CHAIRMAN CARTER: 3526. Got it.

THE WITNESS: No, I don't thinking that's confidential. Would you like me to explain what that means?

BY MR. REHWINKEL:

- Q. Yes. If you would read it first and then explain.
- All right. First of all, you have to read the A. sentence ahead of it to put it into context. following risk items identified for management attention for PEF include -- and then the bullet you requested me to say -- suitability of the soil rock substrata for the AP 1000 structures complexity of karst investigations. So what this means is in the context of when this report was written, we had submitted our application, we had then gotten the October 6th docketing letter, it had questions in it regarding geotechnical, and so we responded to those, and we were waiting to have additional interactions, or RAIs associated with this

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subject. And so they required management attention.

- So just as a follow-up, this item was related to -- it appeared here post October 6th?
- This is definitely a post October 6th, and A. it's post November 20th when we submitted our response to the RAIs that were answered in the October 6th letter.
- Q. I said I had one question, but let me ask you if you would turn to the October 2007 report. It is Page 12 of that report, and it's Bate-stamped 47-017367, and near the front of the document.
 - I'm there.
- Okay. And at the top of the page, the second Q. bullet point, is that a confidential --
 - Α. No.
- Okay. Is that different from what you just Q. referred to?
- It is different only in the fact that what was going on in the two periods. The last answer I gave you was with regards to what we knew in the December time frame following the docketing and the questions in the docket letter. Back in October 2007, we had just completed boring for the analysis for the site, and so we were analyzing all of those results and doing that analysis to develop the application, particularly

Section FSAR 2.5 on geotechnical. And so we were examining the suitability, because until the work is done and you can complete all of those investigations necessary to demonstrate that the plant can be sited at a particular site, you know, you don't have the final answer. And in the case of the October 2007 time frame, we would have still been in an analysis of the raw data from the borings that were taken at the Levy site.

- Q. Okay. In a September report excerpt --
- A. From what year?
- Q. 2008. Would you expect that same risk item that you show in the December report to be in that report? And I am looking on Page 13 of that report excerpt, the September 2008 report excerpt.
- A. Yes, because -- yes, I would expect it, and here is why. When you look at our COL application, there really is three parts to it. There is the part that points to the design control document, or what people refer to as the DCD which embodies the technology descriptions of the AP 1000s. There's a section of the COLA related to, if you will, the reference COLA portions that we're involved through Newstart to develop those standard sections. And then what remains is Levy specific, which is geotechnical, hydrology, weather, flooding, environmental. And so it's not surprising

1 that a lot of the management attention items would be 2 site specific because they are the ones that are unique 3 to our site. 4 Q. Okay. Thank you. 5 A. Okay. 6 Do you have Exhibit 147? Q. 7 A. I do. 8 Q. And this is the March 2008 excerpt JVT report 9 monthly report excerpt. 10 Α. Dated April 10th, 2008? 11 Q. Yes. 12 A. Yes, I have that. Okay. And this is a document you would have 13 Q. 14 -- or your name is -- you would have seen this? 15 A. Right. This is a report to me. On the Page 4 excerpts, the second page of 16 Q. 17 that exhibit. Can you -- first of all, this is a 18 confidential document, correct? 19 Α. Yes. 20 Q. Under the risk matrix heading, the first 21 bullet point? 22 Yes. Α. 23 Q. Is that something that you can read -- well, 24 let me ask you this. Is the first sentence something 25 that you can read -- the first two sentences something

that you can read publicly?

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- Yes, I can. Progress Energy is maintaining a risk matrix for PEF COLA. The JV provides inputs to this risk matrix. The risks associated with the LNP site are -- and it indicates in parentheses if they are new they are in blue.
- Q. What about the first bullet point, can you read those first two sentences?
- Right. I would prefer to characterize this Α. And what it is characterizing is we have been doing analysis on karst for the Levy site, and we concluded they were a little bit more complex than anticipated, and additional evaluation was necessary.
- 0. Okay. Can you tell the Commission what you mean by karst?
- Karst has to do with features in the limestone substrate where you may have a pathway, for example, for, like, water to move through. And so -- or they could be places where you have a void that is filled with like crushed limestone or weathered limestone. what it means is it's not solid. There are little pathways and crevices that you may have movement of water through.
- Q. Now, does the presence of calcium carbonate define whether it's karst or not?

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- Α. I'm not a geotechnical person, but it has to do with can -- do you have the presence of these minute cracks or fissures, whatever, and does water move, and can you have the potential for dissolution.
- 0. Okay. So the rock dissolving based on the presence of the water and the reaction with the water and the rock?
 - Α. Typically the moving water.
 - Ο. What does the term postulated mean there?
- What that means is in the Levy site we do Α. borings underneath the site that characterizes what it looks like below that site where the footprint of the reactor sits. We also do those out in the actual free field around the site. So because we don't do an infinite number of borings, we don't characterize it everywhere. We are taking a representative sample, and so we then have to evaluate what those karst features would look like based on -- inferred from what we bore and get as boring results, but also inferred from regional information that is available in public sources for geology.
- And some of that involves creation of a Q. modeling?
- Correct. And specifically the modeling that Α. we do consider is the long-term movement of water in

16.

that substrate and whether it affects the ability of that substrate to hold the load above it.

- Q. Okay. Now, isn't it true that the NRC had asked questions in their prefiling meetings with you about this issue?
- A. They asked questions as regards to earlier documents you showed me. Yes, when we had some preapplication audits, we talked about the investigations for karst features and how that would be done.
- Q. Okay. And based on those conversations you did additional data gathering and analysis?
- A. It was already planned, but we probably expanded it based on their comments. It would have to be addressed in any case of a COLA to fully complete an FSAR 2.5 section that fully characterizes the geotechnical substrate to demonstrate that when the plant is sitting on it, it supports the load and in a seismic event that the building -- you can predict the behavior of the building and it will not violate any of the seismic criteria of that building.
 - Q. Okay. Now, can --
- MR. MOYLE: Can I just make a point of clarification, if I can? I mean, because I have probably a few questions -- really, I hate to interrupt

your cross, but based on the witness' response, am I 2 correct in that any information related to karst and the 3 geology of the area -- I mean, that's not considered 4 confidential by Progress, is it? 5 MR. REHWINKEL: My MO is to ask the witness, because I do not know. 6 7 Mr. Chairman, I will direct my response to 8 you, because I think it is a valid question that 9 Mr. Moyle raises, and we have had some discussions with 10 the company. This sounds strange to say that to 11 expedite this, because it is taking awhile, but it could 12 take even longer if I explored the contractual reasons 13 why the witness may or may not consider information 14 confidential. 15 I think Mr. Moyle raises a valid point, but I 16 do not know the ins and outs of the contracts under 17 which they are operating and so I am, in an abundance of 18 caution, relying on Mr. Miller's expertise with respect 19 to whether it is confidential or not. 20 CHAIRMAN CARTER: We will cross that bridge 21 when we get to, Mr. Moyle. 22 MR. MOYLE: I was hoping maybe --23 COMMISSIONER ARGENZIANO: Mr. Chair. 24 CHAIRMAN CARTER: Commissioner Argenziano.

COMMISSIONER ARGENZIANO: Yes. In regards to

that question, and I don't know, maybe staff can help me here, why would anything pertaining to the karst nature of the topography or geography, whatever you want to call it, be confidential at this point? Maybe somebody could -- if it is, and I'm not even sure.

CHAIRMAN CARTER: Mr. Burnett.

MR. BURNETT: Thank you, Mr. Chair.

Mr. Chair, to the subject confirmation by Mr. Miller, if the question is rooted without reference to a document of what is the geological nature and questions about the geology of the site, certainly that's nothing that I could imagine would be confidential. However, if the question is asked with respect to a document, that can be the basis for a contractual change order or a modification to a contract, that's what I think brings the hesitation. So I agree that those are very distinct issues. But if we don't reference a specific document that is perhaps being used as a contractual amendment or something to do with a contract, we're fine to talk about rocks.

CHAIRMAN CARTER: Okay. I think that will get us where we need to be. Mr. Rehwinkel, you may proceed.

MR. REHWINKEL: Thank you, Mr. Chairman.

BY MR. REHWINKEL:

Q. Mr. Miller, can the remaining portions of that

paragraph be read, that paragraph, that bullet point there?

- A. I do not have a problem with reading these two. I don't think that's necessarily a confidential issue by itself. Additional evaluation and possibly fieldwork investigations may be required. This is a risk that requires close attention so as not to delay the COLA submittal.
- Q. Okay. Now, the purpose of that statement is that at this time, this report was written in April 2008 for the month of March 2008, and you are running up close to the deadline for submitting your COLA, is that correct?
 - A. That's correct.
- Q. And the deadline is the end of July, but you have got to sometime in advance of that actually have it in form and review, correct?
 - A. That's correct.
- Q. Okay. Now, some of the response to this concern here was occurring at this same time in Chicago, correct?
 - A. Explain your question, again.
- Q. Was there a meeting going on with the JVT and Mr. Rizzo related to revolving some of these concerns?
 - A. I don't know -- I don't understand your

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question and what you are asking. We certainly had Rizzo involved in this time frame in foundation design and that it relates to this subject.

- Okay. Well, let's turn to the next page, Page Q. 9 of this monthly report. And with respect to this bullet point here, can you tell me what that refers to starting -- the bullet that starts with the word meeting under Task Number 2, 3, et cetera?
 - You asked me for the first bullet? Α.
 - Q. Yes.
- And I think I can provide that to you. meeting was held in Chicago to develop JV recommendations for a success path for development of FSAR Section 2.5.4 and supporting documents. JV recommendations are documented in Impact Evaluation 137.
 - Okay. What does that refer to? 0.
- I don't recall specifically what Section 2.5.4 is. It is certainly in the geotechnical portion of the I don't recall specifically what the issue was at that time. If that is the foundation section, I would have to pull the FSAR out and look at that subsection number.
 - Q. Okay. Let me ask you to turn to Exhibit 148.
 - Α. Okay.
 - Q. This is a letter from Debra Loudenslager to

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Gary Grant?

- A. Right.
- Q. Dated March 11, 2008?
- A. Correct. And I would not consider this confidential any longer.
- Q. Okay. So this is just a letter saying that the company is going to be auditing CH2M HILL as a follow-up to the six-month audit frequency following the stop work order that we discussed earlier?
- A. This is a notice that they will be doing the follow-up six-month frequency audit.
- Q. Okay. This is just an example of what we discussed earlier with the increased frequency of the audits?
- A. It is. As a matter of fact, if you look at the second paragraph it explains that obviously the stop work order occurred in March of 2007. You could see there was an audit conducted October 1st through the 4th of 2007, so that was the first follow-up audit. Now, this is the next follow-up audit that's going on.
 - Q. Okay. Let me ask you to turn to Exhibit 149.
 - A. Okay.

CHAIRMAN CARTER: So we are all on the same page, just kind of mention the cover on it.

MR. REHWINKEL: This is Rizzo/Randazzo

Documents.

proceed.

BY MR. REHWINKEL:

A

Q. Are you familiar with this document?

A. Only since I looked at it here a few moments ago. But I do understand generally the scope of what this is about.

CHAIRMAN CARTER: Okay, thank you. You may

- Q. Okay. Do you know where this -- does this document describe a meeting?
- A. It does, and there is a typo at the top of this. This meeting probably occurred March 6th, 2008, at the Sargent & Lundy offices in Chicago.
- Q. Is this the meeting that was referred to in the previous -- well, Exhibit 147, on the last page of that exhibit?
- A. I would believe this is probably that meeting, because and the way I can tell that is because in the previous one it referred to a certain Section 2.5.4, and if you look under Section 5 of the document we are talking about now, this is Document Exhibit 149, that's the subject of the division of responsibility.
- Q. Okay. And under Section 5 on that Page 1 of this exhibit -- well, let's go back up under attendees. Are people who are attending this meeting, is that

1 confidential?

- A. No, not at this point.
- Q. Okay. So we have Paul Rizzo of Paul C. Rizzo Associates, another, Mike Edwards from Paul Rizzo, and then three people from CH2M Hill?
 - A. Correct.
- Q. And a man named Anthony Randazzo of Geohazards, and A.K. Singh of Sargent & Lundy, is that right?
 - A. That's correct.
- Q. Now, Mr. Randazzo is the head of the Geology
 Department at the University of Florida, is that right?
- A. I'm not aware of that. He could be. I don't know him.
- Q. Okay. What about Item 2 under purpose of the meeting, is that confidential?
 - A. I'd like to paraphrase it, if I could.
 - Q. Okay.
- A. The thrust of this purpose is a meeting to develop an approach that would finalize the development of the FSAR that would provide the overall conclusion and address everything such that it would demonstrate the site had no fatal flaws for siting an AP 1000 power plant there, and it had to be technically appropriate, economical, and defensible.

- Q. Okay. Would I be mistaken if I characterized this as the purpose of this meeting was to support a conclusion that had already been drawn?
- A. No. Based on the time frame of this meeting, the work was still in progress and they were developing the necessary analysis to demonstrate that the AP 1000 could be sited at the site. It was still in progress, particularly the foundation design.
 - Q. Section 4 of this first page here.
 - A. Yes.
- Q. This referred -- well, let me strike that. Is the information in Section 4 confidential, or Item 4 on Page 1 of the document?
- A. Let me review this. I don't believe the overall thrust or the paraphrasing of this would be confidential.
- Q. Okay. Well, could you paraphrase it for me, then?
- A. It is discussing findings of site geology and site visits to examine exposed Avon Park formation. And exposed meaning places there has been a vertical cut on a wall so you can actually see the layers of what some exposed once you make that cut, such as like you could see along the barge canal, for example. And they are talking about methodology that Rizzo is using to

address the occurrence of voids below the site, and what they would consider to be the probability of those voids and the probability of their sizes.

- Q. And that's an issue that was important to resolve for purposes of NRC review and ultimately approval of the LWA and the COLA, correct?
- A. Yes, because this site being in Florida has the potential for karst features, so you would have to address this for any site that you selected in Florida, and this would have to be addressed in the submittal of the COL application.
- Q. Okay. Now, in Item 5 of this document, is it true that this -- well, could you tell me what's going on here?
- A. Yes, and I actually talked about this earlier. As we furthered the evaluation of the site by reviewing all the borings, the regional geotechnical analysis, and as we advanced the design of the foundation for the Levy site, it became very clear that they were coupled together obviously, and so what you see here in a statement, it says that. Site geology and foundation conceptual design are closely coupled. And to facilitate the completion of the FSAR portions 2.5 that relate to the foundation design, we transferred the work that was in progress from CH2M Hill to Paul Rizzo

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Associates, who was also working under the consortium. So all this work is still within what we refer to as the JVT, our COLA preparer, but it was transferred among the parties of the JVT. And you recall from my earlier statement that was based on the need to have subject matter experts that could support the foundation design of the roller compacted concrete bridging mat.

- Q. Okay. So, on the next page, Page 2 of this document, that first sentence, is that confidential?
 - A. The concept I can address.
 - Q. Okay.
- A. As part of this change we had to address the scope additions to some subcontractors and the scope deletions of others.
- Q. Okay. Was there additional funds associated with that, expenditure of funds?
- A. I would have to go back and look at the actual impact evaluation form. I don't recall.
 - Q. Would you be surprised if it was not?
- A. Would I be surprised if there is not what, sir?
 - Q. If it did not cost more?
- A. I just don't recall, because I don't know if that particular impact evaluation included other scope changes that were not related just to the DOR changes.

2	that?
3	A. I would just go request this impact evaluation
4	that addressed this DOR. I do not have it here with me.
5	Q. Could that be done before you come back on
6	rebuttal?
7	A. I don't know if I can get it here in hard
8	copy, but, probably.
9	Q. But the answer?
LO	A. Oh, the answer, yes. I could get the answer.
L1	Q. Well, could I ask that you do so without
12	asking for a late-filed exhibit, and we could ask about
L3	it after exchanging information off the record?
L 4	A. Yes.
15	Q. Thank you. Look at the last paragraph under
6	this Section 5, this Item 5. It starts off it was
_7	agreed. Can you tell me what is involved there and why
-8	the decision that is reflected in the last sentence.
.9	First of all, can this be read publicly?
20	A. I would say no in this case because it has to
21	do with other preparations we were making for the rest
22	of the regulatory process.
23	Q. Okay.
24	A. The first sentence I can address.

Q. How difficult would it be for you to determine

Okay. Well, I'm more interested in the reason

25

Q.

1	for the last sentence there. Is that what your answer
2	was?
3	A. That's the sentence that I'm reluctant to say
4	here for confidential reasons.
5	Q. Okay. Item 7, is there anything here that is
6	confidential? Let me ask it this way: The document
7	that is described in Item 7, was that given to the NRC?
8	A. I don't recall. And it could have been
9	referenced in the FSAR. I just don't I would have to
0	go back and look.
1	Q. Are you familiar with that document?
2	A. No. I'm not familiar with the details of it.
L3	I knew it existed.
L 4	Q. Do you know what the conclusions of it were?
.5	A. Well, fundamentally when all the work was done
. 6	the site is suitable to deploy an AP 1000 at that site.
.7	Q. Okay. Item 9, field investigations. Can you
.8	review that section there on Page 2 and Page 3 of this
.9	document and tell me what's going on there?
20	A. This is under field investigations, correct?
21	Q. Yes.
22	A. The whole content of Section 9 has to do with
:3	the pace of how the borings devices advance through the
:4	substrate and places where it goes faster or slower, and
:5	in cases where it moves faster, what other additional

information you collected including the actual sample itself that would explain the reason for that.

And let me give you a simple example. If you go through hard limestone, it goes a certain speed. If you then enter a zone, let's say a pocket where it is filled with crushed limestone, it would change the speed of the way the boring would be advanced.

- Q. Is this something that Paul Rizzo is going to do to supplement or independently assess work that had been already done?
- A. This is more a matter of he is reviewing the results of the boring and reviewing all the information available from that to understand why the boring results were as they were.
- Q. Can you turn to the next page of this document and tell me are you familiar with this document here?
 - A. I am not.
- Q. You have never -- you are not even aware of its existence?
- A. Until I saw it. I'm not surprised it is related to our site, but I have no problems with answering questions on it.
- Q. This is a letter -- can I describe who this is to and who this is from?
 - A. This one is a little bit not clear to me since

I don't know the context of how the letter was created.

Q. Well, it's subject to a claim for confidentiality and I'm willing to treat it that way. Let me just ask you, the conclusion on Page 5 of the letter, can you turn to that page? And this kind of goes along the lines of Mr. Moyle's question. There is a sentence, the second sentence in that paragraph that starts to our knowledge. Can you read that just to yourself first and tell me if that can be stated publicly?

A. I believe this is, because it is a geotechnical subject that is probably represented in our FSAR 2.5 final version. To our knowledge, our assessment of the lateral extent of dissolution features associated with vertical fractures within the Avon Park Foundation limestone is new information that is not otherwise available in the geologic community.

- Q. Okay. What about the -- so, is this stating that the assessment or characterization of the site and the geology of the site is new?
- A. Since I don't know the context of the letter,
 I can't answer your question, but it could be a
 comparison of what's in the public domain for research
 that describes geologic formations in Avon Park and what
 did we see as we did borings here locally on the site.

1 But without knowing the overall subject, I can't answer 2 your question. 3 Let me do this. Let's set this exhibit aside Q. 4 for a second and ask you to turn, if you would, to --5 there is a nonconfidential exhibit in your -- it's the 6 September 12th LWA supplemental filing. 7 A. Yes, I see that. 8 **Q**. 152. Do you have that? 9 Α. I do. 10 Q. Can you turn to -- well, this is the document 11 that you responded to the NRC with respect to the scope 12 of the LWA, is that correct? This is the document that we responded to the 13 Α. 14 September 15th letter, and that included LWA, because 15 there were more subjects in here than just LWA. 16 Q. Correct. But there is an Attachment 2, which 17 is Bate's 64-000064. Do you see that? 18 A. I see that. 19 Q. And is Attachment 2 information that was 20 requested by the NRC for both COLA and LWA evaluation? 21 I see that. 22 Q. Okay. And if you could turn to Page 7 of that 23 attachment, please. Are you familiar with this 24 document? 25 I reviewed it when it was created, but it has

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been quite awhile.

- Q. Okay. Well, let's go to the letter. Turn back, if you would, to the letter. There's a two-page letter from James Scarola to the NRC.
 - A. Correct.
- Q. And then on the third page there is a bc to Bill Johnson, your Chairman and CEO.
 - A. Yes.
 - Q. Danny Roderick and yourself?
 - A. Yes.
- **Q.** Okay. So this is a document that was important?
- A. Oh, yes. I was well aware at the time, but I have not looked at it for awhile, particularly the attachment.
- Q. All right. And back to this Page 7 of the attachment here, and this is all public knowledge, right?
 - A. Yes.
- Q. Could you read this paragraph next to the last -- down that page?
- A. I'M going to have to ask you to take me to the page, again.
 - Q. I'm sorry, Page 7. This is Bate's 64-000070.
 - A. Correct. And this is on Page 7.

Q. Yes.

- A. And you would like me to read which --
- Q. The next to the last paragraph, it starts with the average width.
- A. The average width-to-height ratio of features associated with vertical fractures is 1H:5V, limiting the lateral extent of these features to approximately 20 percent of the vertical extent, as supported by geophysical testing and field observations. Dr. Anthony Randazzo, a subject matter expert, is supportive of that approach that the horizontal dimension is a fraction of the vertical dimension of the feature.
- Q. Now, is this -- this is something that you submitted to the NRC for them to consider and rely upon in evaluating your LWA, correct?
 - A. Yes.
- Q. And does it appear to you to be the subject of the document that we were discussing in Exhibit 149?
- A. I'm not a geology or geotechnical expert, so the subjects sound familiar, but I don't know specifically if it's the same subject. It has to do with, I believe, if there is a feature does that feature generally run vertically or does it run horizontally.
- Q. Okay. Well, if you would turn back to 149 and Page 1 of that letter. There is a -- two-thirds of the

way down there is a sentence that starts "the five" do you see that?

- A. Yes.
- Q. And then I don't know if that's confidential or not, but it looks like that there are five principles that someone is being asked to comment upon.
 - A. Yes, I agree with your characterization.
- Q. Okay. And on the fourth item on the second page of that letter it appears to relate to that item that you read about in the September 12th supplemental report, correct?
- A. It looks to be a similar subject. But, again, I have to remind you, I'm not a geologist or a geotechnical expert.
- Q. Okay. Now, didn't the statement that you read from the September 12th filing, wasn't that the subject of further inquiry by the NRC on October 12th as part of their RAIs?
 - A. You mean the October 6th letter?
 - Q. I'm sorry, the October 6th, 2008, letter.
- A. I would have to go back and review it, because as I stated earlier, we have many RAIs that come in, and I would have to go back and review specifically what was on a particular letter. But, in principle, we could get several questions on any particular subject.

1	Q. But didn't the NRC ask about a question about	
2	the statement the representation that Doctor Randazzo	
3	supported this aspect of the geology?	
4	A. I would have to go back to the October 6th	
5	docketing letter and look at the questions and validate	
6	what you are asking me.	
7	Q. Do you have that with you?	
8	A. I do.	
9	Q. Could you take a look at it, please? And this	
10	is also an exhibit to Doctor Jacobs' testimony, correct,	
11	the October 6th letter?	
12	A. It is an attachment exhibit to my rebuttal	
13	testimony.	
14	Q. Okay.	
15	A. So I am looking at in my case it is GM-8 on	
16	my rebuttal testimony.	
17	Q. Okay. And on Page 2 of the RAIs	
18	A. All right. Let me go to there. Are you	
19	reading the page numbers at the top?	
20	Q. The bottom.	
21	A. My copy does not show page numbers. I only	
22	have it as pages of the exhibit.	
23	Q. Okay. Let's look at 5 of 10, then.	
24	A. Page 5.	
25	Q. Do you see the second item on there, the	

second RAI?

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A. The supplement sites, Doctor Randazzo.

O. Yes.

A. Yes.

Q. Okay. And this is the NRC staff asking a further question about the statement that you made on September 12th, correct?

A. That's what this is, correct.

Q. Okay. So isn't it correct -- doesn't it appear from the letter to Doctor Randazzo from Mr. Rizzo that the characterization that the NRC is asking further questions about is one that presents a new view of the geology of the area that's not documented in the literature?

A. From the information in front of me, I cannot draw the conclusion you are drawing. Sir, I would have to go back and review what was in the original COLA and FSAR sections associated with this subject and follow the path of all the documents and RAIs to draw the conclusion you did.

- Q. Well, let's look at the October 6th letter in the RAI. Doesn't it appear from this RAI that the NRC staff is suggesting that they have received a conclusory statement without any information that documents it?
 - A. The phrase that you refer to, sir, is but does

not summarize the information documenting the statement that the lateral extent of dissolution features developed along fractures is about 20 percent of the vertical dimension.

THE COURT REPORTER: Slow down.

CHAIRMAN CARTER: No coffee tomorrow.

(Laughter.)

THE WITNESS: Right. So it is asking for backup information for the summary statements that are presented in our RAI response. It's asking for additional backup.

BY MR. REHWINKEL:

- Q. If I could ask you to go back to Exhibit 149.
- A. Okay. I'm at Exhibit 149.
- Q. Is it fair to characterize this document that the company's contractor, Mr. Rizzo, is asking Doctor Randazzo to support their conclusion about the lateral extent of dissolution features associated with vertical fractures within the Avon Park formation limestone?
- A. Again, I would have to point out to you that I am not a geologist, I am not a geotechnical person, and this is a very technical subject. So without sitting here and having a longer review of this, I cannot validate your statement. I would have to spend -- a slow read of this and probably ask questions of some of

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my staff to answer your question.

- Q. We have established, Mr. Miller, have we not, that the meeting in March of 2008 was at a time when Paul Rizzo was brought in to supplement the geotechnical effort, correct?
 - A. Particularly the foundation design.
 - Q. And the deadline was drawing near, correct?
 - A. The deadline of July 2008 was coming.
- Q. And Paul Rizzo, the company's contractor, wrote a letter in May of 2008, less than three months from the deadline for filing of the COLA, correct?
 - A. May 22nd, 2008, is in advance of July 2008.
 - Q. Yes. And less than three months?
 - A. Yes.
- Q. And it states here in the conclusion section, the last sentence there, I don't know if that could be read publicly or not, that begins with consequently.

 Can that be read publicly?
- A. I don't know the context of how this letter was created, so I would prefer not to.
 - Q. That's fine.
- A. I think the sentence speaks for itself of what it states.
- Q. This is apparently a significant issue that they are seeking Doctor Randazzo's support on such that

they sent it to the NRC. That they, you, submitted it to the NRC as part of your LWA supplemental filing, correct?

- A. It is. But I would like to characterize it as we create analysis and information that we submit in our application. It comes from a wide variety of sources, including things that we actually do field investigations on, literature search, subject matter experts, and here is a case where we are going to a subject matter expert to get an opinion.
- Q. Now, on the last two pages of Exhibit 149 is a draft it looks like of a letter in -- what do you call this, draft changes form?
 - A. Yes.
- Q. That shows where Doctor Randazzo did not agree totally with the representations that Mr. Rizzo was asking him to agree with, is that correct?
- A. I would have to review this letter in detail slowly to come to your conclusion.
- Q. It looks like the red items in here show strikings of words that probably water down, if you will, the opinion that Doctor Randazzo was willing to give. Is that correct?
- A. I don't know if watered down is the correct term for what you see here. Typically, when most

letters are drafted they go through revisions before they are finalized. So I don't consider the term watered down to be the right way to characterize. These are markups that are going to be incorporated in the final version.

- Q. This is not a mere draft, though, is it? In the upper left-hand corner we see some initials and dates and all. This is part of the QA process, is it not?
- A. I don't know what the context of this -- how this document was created and for what purpose, so I can't answer your question if this is a quality document or not.
- Q. But that is generally how it is done, is it not?
- A. This document, the fact that it has got a by and a checked by, it is certainly a technical document. I don't know if it is a quality-related document.
- Q. Okay. Mr. Miller, if I could move to the May 2nd, 2008, audit letter. And this is Exhibit Number 150. Do you have that with you?
 - A. Yes, I do now.
- Q. Okay. Are you familiar with this document? I think on the second page of the exhibit, I think you will see your name.

- A. Yes. I remember when this was done and I remember the report.
- Q. Okay. Now, is this a document that is a result of the stop work order and issues that were discovered in the first quarter of 2007?
- A. It is by virtue of the fact that they were on increased -- an increased frequency of having audits done on them, and so this is a follow-up audit. It appears to be done in the March timeframe of 2008, and so it is related to what happened in March of 2007. However, I do have to remind you that all of our quality providers, under our Appendix B program we have to audit them no matter what. This one happens to be getting their audits more frequently, this company does.
- Q. Okay. Now, just in fairness, this is a document dated May 2nd, 2008, revised May 8th, 2008. Do you see that on the first page?
 - A. I do.
- Q. And in the second paragraph, the last sentence of that paragraph seems to say something very positive about the vendor, is that correct?
 - A. It does.
- Q. Okay. But isn't it also true that this document contains an attachment towards the back at Bate's 47-015861 with a letter from MACTEC, M-A-C-T-E-C,

all caps?

A. Yes, I see that.

Q. Okay. Can you tell me what this MACTEC letter -- can you characterize that in a way that is not confidential?

A. Yes. As part of this audit, we had an extra subject matter expert participate on that audit and that person was a MACTEC employee. They also do geotechnical boring and handle sample logs, those type of things.

And so we had them on the team to provide additional expertise to look at the execution of quality activities by CH2M Hill.

- Q. Okay. Now, what you just described would not be part of a routine audit of your vendors under the QA program, is that correct?
- A. Not necessarily. It depends on who we are going to do an audit on, and this is not unique to new plants. We do it in our operating fleet. We would like to have people that are cognizant of the work they do because you have a much better informed audit when you do that. And so it's not always done, but in this case we chose to do it.
- Q. And what you chose to do with respect to bringing MACTEC along to supplement your audit, if you will, was because of the history of this vendor with

1	respect to the gathering of this data in support of your			
2	COLA, correct?			
3	A. That is correct. In this case we did add them			
4	to the team because of the work experience at Harris.			
5	Q. Now, is it also true that attached to this			
6	letter that's on 015861 is a matrix that reflects the			
7	results of the observations of Mr. Tice?			
8	A. There is an attachment at the back, it is a			
9	table, and it is observations from this individual who			
10	participated on the team.			
11	Q. Okay. Was I not supposed to say his name?			
12	A. Probably not.			
13	Q. I apologize.			
14	CHAIRMAN CARTER: You were doing so well, Mr.			
15	Rehwinkel.			
16	MR. REHWINKEL: I didn't say his first name,			
17	so maybe nobody knows who he is.			
18	BY MR. REHWINKEL:			
19	Q. Okay. Let me ask you if you would turn to			
20	47-015864?			
21	A. Yes.			
22	Q. Does the MACTEC representative			
23	A. Yes.			
24	$oldsymbol{Q}.$ does he identify in the next to the last			
25	line on this table some problems with the collection of			

data?

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Stand by as I read this. The item you referred to was an observation associated with the administrative aspects of completing the paperwork for this. And it's important to point out, and that is in the case of what was identified at Harris and what we were looking for for an extended condition at Levy. issues that we found under the quality assurance program of CH2M Hill were generally related to documentation. For example, documentation of training records, documentation of expertise. In the case of logs for when they collected samples, the precision of filling out all the blanks and putting their name and dates in certain places. There was also document control issues. All of those things that we looked at, we looked at for the case of Levy. What it was not was technical. quality of their work in terms of the technical precision of what they did and the validity of their technical results.

And so what you see here is additional observations, but you also see in the summary cover sheet from this same report, which includes this as an attachment, the comment that says the PGN audit team has concluded that with the exception of the administrative anomalies, CH2M Hill is effectively implementing their

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quality program.

So this row you asked me to look at here is an example of additional administrative anomalies and we required them to go correct those.

- Q. Could you turn to 47-015866, which is another two pages --
 - A. Yes.
- Q. -- further on. And the last item here that starts up near the top and continues most of the page and then on to the next page, is that an administrative item or is that one related to the technical quality of the work?
- A. He is making a technical observation is what he is making. And without going through the details, he's referring to recovery zones. The boring process to collect samples involves a water lubricated boring mechanism. So as it bores through the limestone, if it hits a pocket where it is filled with, say, sand or some very heavily weathered limestone, it may wash that out. And so when you pull that sample to the surface and you have ten feet of core you expect to pull out, you may not get ten feet because you washed some of it out.

And that is referred to as recovery, so he is talking about recovery zones here in his notes. So with this observation we would have gone back and looked at

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that particular log and followed up technically, also.

- Well, what about the paragraph in that column that starts lithologic and discontinuity and the concerns he raises there. Are those administrative with respect to the geological descriptions?
- Well, I think he is making technical Α. observations, but these are not necessarily adverse findings. Personally, I can't read these and tell you that these are necessarily a problem. He is clearly making comments on what he saw in the field boring logs. Where he said he indicates, for example, he says seems consistent with what I understand about that setting. And he talks about some zones where there is some soil inside. And then he has got some comments where something may be incorrect and we would have followed up and see if it was -- see if his comment was correct or not.

And that is how this report was handled. went back to the organization that was involved in this work and had them review these and validate these were not a technical problem.

He notes, does he not, in the far right column Q. that the location of these recovery zones was directly under the reactor -- south plant reactor site, is that right?

A. It's not -- you cannot infer that from what he has got. I would have to go back and look at those codes where the boring numbers were labeled, and it's not confidential, I could say AD-3, for example. And then I would have to go look at that, where it fits with respect to the footprint of the plant. Because, remember, we take core borings not just under the footprint of the nuclear island, but also the turbine island, the waste processing building, annex building, and the general site.

But he says -- and I can say that, it's located in the south plant site reactor area. I just don't know if that is under the nuclear island or some farther out location associated with the south reactor.

- Q. Would the NRC have received this document?
- A. When the NRC comes to visit us and does a quality review, all documents like this are provided to them, because the NRC is looking to validate that we are doing our obligation under 10 CFR 50, Appendix B, to oversight our contractors who provide quality services. So as evidence of that in the criterion related to that we would give them this document.

Now, this is dated May of 2008, and I don't recall all the meetings that we have had with the NRC where this would have come up, but we certainly would

make it available to them.

make it available to the

- Q. Can I ask you about -- if you return to your Exhibit -- is it GM-8? The October 6th, 2008, letter.
 - A. Yes.
- Q. This was the letter you received from the NRC after Exhibit 152 was submitted, is that right? This is the next correspondence you received relative to your LWA?
 - A. I'm not sure what question you are asking me.
 - Q. I apologize. The October 6th letter you received from the NRC, was that in response to your September 12, 2008, letter and your COLA?
 - A. The proper way to characterize it is we submitted our application on July 30th, it included LWA. We then on September 12th subsequently revised the scope of the LWA. This is the first numbered correspondence from the NRC to us since that date.
 - Q. And this letter has been one much discussed in depositions and testimony, et cetera, so it's a key document in this matter, correct?
 - A. Yes.
 - Q. And this was a key document, an important document to the company for a multitude of reasons, correct?

Α. Yes.

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- One of which was the good news that they had docketed your COLA?
- A. That was the most significant outcome from this letter is our sufficiency review was completed and it was technically sufficient to docket.
- Okay. And, the first -- on the first page of this letter at the bottom, the paragraph that starts as discussed with your staff, this was the -- well, this states, "As discussed with your staff, the date that we intend to publish this schedule for review cannot be determined until additional information is provided by you." Not a big surprise, correct?
 - Α. It has happened on several applications.
- And it states, "Although our acceptance review 0. determined that the LNP COLA is complete and technically sufficient, the complex geotechnical characteristics of the Levy County site require additional information in order to develop a complete and integrated review schedule." Was that a concern to you?
- The fact is that we would have preferred to not have to answer RAIs as part of the October 6th docketing letter, so it is not -- a concern is not the right phrase. We would have preferred to receive an October 6th letter and them say we will send you your

schedule, let's say, 30 days from then. So we knew that our schedule would be delayed until we answered the questions in here.

- Q. Okay. Now, we have talked about in looking at these exhibits, and I apologize for the tediousness of them, but we have looked at the exhibits that demonstrate that you spent a lot of -- your vendor spent a lot of time collecting data, analyzing it, and preparing it to submit to the NRC, correct?
- A. It is accurate to say our vendors and our staff spent a lot of time on the Levy site site-specifics because that is the major portion of our application that is unique to our site.
- Q. And, in doing so, there are several references and probably less than the ultimate number of contacts relating to the NRC communication with you about issues that they would like to see addressed in your application, correct?
- A. You are going to have to rephrase -- start your question over again. I lost it half way through.
- Q. The NRC made many contacts, you and the NRC, and you and your vendor and the NRC had many discussions with the NRC staff about what they would like to see addressed with respect to geotechnical information?
 - A. Yes, but let me characterize it the way it

occurs. We had -- before we submitted our application, we had publicly noticed meetings where we discussed the geological features of the site, such as January 10th. But in addition to that there were preaudit visits to the Levy site by NRC individuals, both technical and those looking at quality programs. And so those were the two interactions that you are referring to.

- Q. Would there have been any other phone calls or other informal conversations with the NRC staff?
- A. Well, there could have been. Until we submitted the application that was not likely.
- Q. Okay. And it was the company's opinion that the 18 months that you spent gathering the information was thorough and complete and that you had enough information to present to the NRC for them to make a decision without additional RAIs, correct?
- A. No, that is not correct. If you look at a typical NRC review schedule, there are typically eight major milestones. And the first one on the safety evaluation report, which is the nuclear side of the review, there are four major milestones. The first one is RAIs, and for the Levy site that milestone extends through February of 2010. So we would expect RAIs after submittal.
 - Q. I misstated my question. You expected you had

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submitted enough information to get a review schedule without further RAIs, correct?

- Α. Yes. We expected that we developed an application that was technically sufficient and complete to be docketed and the review to start.
- But that did not happen. And let's turn to Ο. the next page of the October 6th letter, and this one starts off and says, "As necessary, other RAIs will be issued separately." What is that other RAIs referring to?
- A. What they are saying here is the application has been docketed and now they are going to start this process of RAIs on all subjects, hydrology, weather, environmental, population in the area, all of those things. You would expect those to all be issued separately from this October 6th letter, and we are continuing to receive RAIs, and would expect to continue to receive RAIs and supplemental RAIs through February of next year.
- But then it says, "Because of the scheduling uncertainty in the areas of geotechnical science and structural engineering, the NRC staff does not intend to commence a review of these areas until all RAIs are sufficiently answered." Do you see that?
 - I do. A.

- Q. Now, that refers not only to your LWA aspects of your application, but I guess the foundational aspects that we've discussed a little bit earlier today.
- A. This would refer to the broader geotechnical suitability of the site for the plant.
 - Q. But it would relate to the LWA?
- A. Because certain subjects are on both the LWA and both the overall geotechnical, it could relate to it.
- Q. Well, they continue on for all other sections of the LNP COLA, the NRC staff intends to commence reviews based on the availability of resources. Do you see that?
 - A. I do.
- Q. So is there a dichotomy presented here by the NRC staff that indicates that everything but the geotechnical aspects of this review will be resource driven, while the geotechnical review will be less so?
- A. No, I don't think that is the proper way to characterize this. In the NRC staff, as they review an application, they divide up the piece-parts of an application, and it depends on subject matters experts. Some of those subject matter experts are NRC staff, others are outside national labs, like Pacific Northwest National Lab.

And so this paragraph is talking about how they are going to assign resources and when those resources would be committed to the review. That's what this sentence is at the top of two are referring to.

- Q. There's special mention made of the geotechnical aspect of the review here, correct?
 - A. It is, that is correct.
- Q. And, finally, in this next paragraph there is a sentence that starts because of, "Because of the complexity of the site characteristics and the need for additional information, it is unlikely that the LNP COLA review can be completed in accordance with this requested time line. The NRC staff expects to interact with you as the safety and environmental review schedules are developed." Do you see that?
 - A. I do.
- Q. So in three paragraphs, the geotechnical aspect of the application have been highlighted by the NRC staff. Would you agree with that, three successive paragraphs in this letter?
- A. I agree that geotechnical is in each of these three paragraphs.
- Q. But isn't it true -- wouldn't you agree with me that they are given special mention apart from the other aspects of the application that you filed?

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A. Well, they are, but I have to go back and
remind you, as we stated earlier, our application is
three large components, and the site-specific portion is
dominated by things like geotechnical. So the DCD
portion and the referenced COLA are driven by other
schedules, so it is not surprising to me they would
focus on geotechnical as an example of something that
was site-specific that would drive our schedule.

- Q. How many LWAs have the NRC reviewed under their new LWA rule?
 - A. At what point?
- Q. At the time that you filed this on September 12th?
- A. This was an LWA submitted with the early site permit for the Southern Vogtle Units 3 and 4.
 - Q. It was submitted. Had it been reviewed?
- A. I suspect it was probably in review at that point because it has now been approved.
- Q. But at the time the NRC staff had not reviewed, completely reviewed an LWA request, correct?
- A. If you judge that based on they had not approved and issued an LWA, the answer is that did not occur until about a month ago for the Southern Company Vogtle Station.
 - Q. Did they give Vogtle a review schedule?

Α. I don't recall what they got under their ESP.

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- Q. You didn't go look and see what the Vogtle milestone review was, or if there was one related to their LWA?
 - I did not. Α.
- So there was no reliance made on the way they Q. treated the Vogtle LWA with respect to the milestone review letter in your decision-making in 2008, correct?
 - Α. We did not look at the Vogtle letter for that.
- Now, was the Vogtle LWA in any way analogous Q. to the LWA that you submitted on September -- with your COLA and in your supplement with respect to the geological and geotechnical complexity?
- Α. In regards to what we submitted in the COL in July of 2008, there were similarities, and then in the September 12th there was additional scope added to our. So the similarities would be, for example, after the hole was excavated, engineered backfill, they had it. We had it also. Ours just provides some additional foundation technical support. Then things like mud mat, forms for the bottom foundation, possibly rebar, those are similar.
- Q. But with respect to permeation grouting and diaphram wall, those aspects were not part of the Vogtle LWA?

- A. They are not part of Vogtle's LWA because they are not part of their scope of work that's going to be completed before first concrete. They are far enough away from the Savannah River and the groundwater levels are such that they did not require diaphram walls or permeation grouting.
- Q. They didn't have any issues about karst topography?
- A. I am not familiar enough with their geology to answer your question on that.
- Q. But you are not aware that there was any karst topography involved?
- A. I'm just not aware. I'm just not familiar with their geology to answer your question.
- Q. Progress and/or your vendors did not make any inquiry as to that aspect of the Vogtle LWA for purposes of evaluating the likelihood of getting the review schedule you wanted, is that correct?
- A. We did not. Obviously they submitted an LWA under an ESP, which is a different licensing process than we did under our COLA. I do not know the final scope they had in their LWA, if it was the same as ours, and their geology is different.
- Q. So an LWA submitted with an ESP would be different from an LWA submitted with a COLA in the sense

that you would not have the bridging, if you will, of the consideration of the geotechnical data for both aspects of the review, is that correct?

- A. I don't believe what you said is correct. So I'm going to ask you to repeat it, again, so I can validate that.
- Q. Okay. Now, in your COLA report you have submitted geotechnical data that is intended to apply to both your LWA -- at the time you filed it in the July and September filings, you submitted geotechnical data for the NRC to review in their consideration of both the LWA and the COLA generally, correct?
- A. Correct. And a prime example of that would be the engineered backfill is the LWA scope and it is necessary for an LWA approval and it's necessary for the final overall geotechnical review.
- Q. So if you submitted a COLA with an ESP you would not have that same kind of a commonality of the use of geotechnical data, is that correct?
- A. That is not correct, and let me explain. The Vogtle site. I understand that site is on engineered backfill. I'm not familiar with what's below it and how far you go down before you hit traditional bedrock. However, I know that engineered backfill was in the scope of their LWA. For them to complete the equivalent

of the FSAR 2.5 section analysis that says how would the plant behave in a seismic event and what will the compression of that plant sitting on that soil, that engineered backfill do, they would have to have that same information for both purposes.

The NRC would not have authorized an LWA on engineered backfill for Vogtle without understanding the global consequences of that for seismic and, if you will, dead weight of the plant sitting on it.

- Q. Are you saying engineered backfill?
- A. Engineered backfill as opposed as to just backfilled as you would go like in a parking lot. It is engineered because it's blended.
- Q. Is that the only aspect of the ESP and LWA combination that would be analogous to the LWA and COLA?
- A. No, it goes beyond that. I'm not familiar with their exact scope, but I believe Southern's scope for the LWA was the engineered backfill, it was the mud mat, it was forms for the bottom foundation. We had those similar things in our application for our LWA, but the design of that engineered backfill for them and their forms is all related to the foundation suitability.
- Q. What was the NRC staff's reaction to your assertion that the dewatering activities at other

nonnuclear sites should be taken into consideration by them?

A. We had technical discussions -- and I take this in the context of before the September 12th change of our LWA scope?

Q. Yes.

A. It's not so much related to its comparison of can it be done on nonnuclear applications like a building, like that, it's more related to the nexus to nuclear safety. We are going to place grout in the bottom of where we are going to excavate and the purpose of that is to seal it so we can dewater the excavation. However, that grout we take no credit for in our application for any safety-related purpose. Likewise, the diaphram wall we do not take any credit for for any safety-related purposes, so from our perspective it was -- we did not deem it to be necessary to be an LWA scope.

- Q. So the diaphram wall is something that basically after the dewatering occurred, and the foundation and the RCC is in place there, and then your 35-foot-thick foundation is put in there, that wall becomes irrelevant, is that right?
- A. It is irrelevant in the fact it is not credited in any way for the nuclear safety aspects of

the nuclear island foundation.

structure, or support for the foundation?

A. It is not credited. And it might be useful just to make sure -- let me explain this diaphram wall.

It's not intended to provide stability, or

just to make sure -- let me explain this diaphram wall and grout. What you do is you first install the diaphram wall to create a periphery that is water tight so water cannot move laterally into the area you are going to excavate. Then you go within that and you drill and then you grout the top surface of the limestone to seal it. And then what that does is it creates what we refer to as a bathtub.

With the seal around the outside and the seal at the bottom you can then go in and dewater and begin to lower and excavate that. And then inside that large opening then you go back in with the engineered backfill, which is about 30 or so feet thick of an engineered blend of materials to create a roller compacted concrete bridging mat. Once all that is in, again, we did not credit the grout nor did we credit the diaphragm wall as supporting any safety-related purpose in the design of the foundation.

Q. But the NRC staff looked beyond your assertion that you weren't seeking credit for the permeation grouting as far as strengthening the strata underlying

your mat, correct?

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Α. They looked --

- Ο. They did not -- they didn't look at it from that standpoint. They looked at it from the standpoint of whether it would increase the dissolution rates of groundwater flowing against the area that you had grouted, correct?
- Let me answer your question more simply. Α. they were looking for with those two items is to ensure they had no impact on any nuclear safety-related function. So, for example, the grouting that was in the limestone, would it effect the characteristics of the limestone such that it behaved differently.
- Right. So they weren't so much concerned Ο. about whether you were taking credit for or not for the strengthening of the limestone, they were looking at whether it had other unintended impacts, correct?
- Α. That's what they wanted to assess and confirm. We made presentations over telephone calls with them to suggest to them that this will not be an issue, but they chose to take the time to do that themselves and draw their own conclusion.
- And they did that through RAIs on October 6th Q. that you provided answers to on the 20th of November, correct?

- A. Well, and let me say it a different way. We were unable to convince them prior to September 12th, so we moved the work into the scope of the LWA to prevent our COLA from being held up. And if you look at the letter, when we do that we point out the fact that we are still reviewing that scope of work, whether it should be in the LWA or not.
- Q. But the NRC staff was not impressed with your argument about the nonnuclear dewatering activities because they did not deem that to be analogous to their nuclear safety-related mission, is that correct?
- A. Your phrase that they were not impressed, let me -- I don't agree with that phrase. The point is while that's information we provided them, their mission is to ensure the health and safety of the public, and so they felt the need to consider the diaphram wall and grouting in their review of the nuclear safety aspects of the foundation and geotechnical design.
- Q. They didn't indicate to you that they were really going to consider that in any way, did they?
 - A. Ask your question, again.
- Q. The information you provided about the nonnuclear dewatering activities at construction sites around the country, they did not -- they indicated to you that they were not going to consider that in their

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review, isn't that correct?

- I don't recall the discussions. I think the point is they were looking beyond whether it could be done, because it has been -- because it has been done on other nonnuclear applications. They were looking at other aspects of their review.
- Do you recall addressing this issue in your deposition?
 - Α. I don't recall.

MR. REHWINKEL: Mr. Chairman, if you would give me just a minute. I am almost done.

CHAIRMAN CARTER: Absolutely.

BY MR. REHWINKEL:

- Do you recall -- and I could show you your Q. deposition, but let me just ask you, on Page 55 of your deposition, do you recall me asking you about the dewatering measures in typical large construction projects in Florida and your discussion of those with the NRC staff?
 - Α. I generally remember that discussion.
- Q. And I asked you actually on Page 11, Lines 1 through 8 -- this is on Page 55 of your deposition, starting on Line 3. Actually, on Page 11, Lines 1 through 8, you state that comparing what you were proposing to dewatering measures in typical large

construction projects in Florida, there was not a lot of difference, is that right?

And your answer there was the point of this statement in my testimony is to say in areas where there is high groundwater, techniques like this are commonly used to facilitate construction.

My question to you, okay, did you make that point to the NRC staff. Answer, we did. Okay. What was their reaction to that, and your answer was we understand your comment.

- A. Yes.
- **Q.** Okay. My question to you was they did not seem to give you any indication that they were really going to consider that as part of their review, did they?
- A. No. I think my comment in my deposition is correct. We understand your comment, but that is not the basis for their making their decision. They were going to look to ensure that there was no impact from the diaphram wall and the grout on the nuclear safety function of the foundation design.
- Q. And when would you have had these conversations? I'm not saying necessarily you, but your company with the NRC staff?
 - A. After January 23rd, when the proposed schedule

was communicated to us, we had dialogue with the NRC following that to discuss with them why they felt there was so much time needed to review the LWA. And we probably at that point in time, if not earlier, talked about this. But our point was to tell them, as we believe, you can do the review of these two features, the diaphragm wall and the grout, and conclude that in advance of the overall COL.

- Q. But your conversation with the NRC staff to bring to their attention these other nonnuclear dewatering measures was well before you got the letter from the NRC staff saying when they would consider the LWA concurrent with the COL, correct?
- A. I can't answer your question yes or no, because I don't know what venue you're talking about. If you recall, we had meetings, technical meetings with the staff in January, June, August, and we had several, so in any of those forums we could have talked about this. I just don't recall, but I would not expect them to say -- I would not expect the NRC to say solely because you can do this at a building in Miami, that that is the basis for them not to review it. We would not expect them to say that.
- Q. Okay. When you said January, I wanted to make sure you weren't talking about 2009, you were talking

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about 2008.

- A. 2008. But, now later on, as I said, after January 23rd, 2009, we had calls with them. We did talk about the time that they believed they needed to review the LWA request and why we believed it should not take that much time. We did have that dialogue.
- Q. Okay. But certainly you did not get any feedback from the NRC prior to December 31st, 2008, that indicated to you that they gave a lot of credence to your analogy about dewatering at nonnuclear construction locations, correct?
- A. I don't understand your phrase gave a lot of credence. We shared that information with them because it is how you do it, but I was not expecting for them to draw a judgment on it in terms of the LWA.

MR. REHWINKEL: Mr. Chairman, that's all the questions I have for Mr. Miller.

Thank you, Mr. Miller.

CHAIRMAN CARTER: Thank you. Mr. Brew.

MR. BREW: Thank you, Mr. Chairman.

Good evening, Mr. Miller.

THE WITNESS: Good evening.

MR. BREW: I don't have any red documents and we are not going to talk in code.

CHAIRMAN CARTER: We are all grateful for

that.

BY MR. BREW:

CROSS EXAMINATION

Q. One quick follow-up on the discussion you just had. My understanding from all the documents you have been through is that certainly throughout 2008 in your discussions with the NRC, Progress was crystal clear about its reasons for the LWA and its importance to the schedule, is that right, to the NRC?

- A. It was clear to us and we communicated that to the NRC that the LWA was important for our overall schedule.
- Q. Overall schedule. And that was communicated not only to the NRC technical staff, but in your meetings with the NRC senior staff, is that right?
- CHAIRMAN CARTER: Mr. Brew, before you go on, hang on one second.

Mr. Rehwinkel, please make sure your microphone is off, please, sir.

MR. REHWINKEL: I apologize.

CHAIRMAN CARTER: No problem.

You may continue.

MR. BREW: Thank you.

BY MR. BREW:

Q. And is it also fair to say that throughout

that period in the discussions back from the NRC they responded by telling you what they needed?

- A. What they needed --
- Q. In terms of information, what they needed to review?
- A. I'm not -- I don't understand what your question is asking.
- Q. Well, I'm just trying to get to how you all communicated. You communicated what you needed in terms of the limited work authorization and its importance to the schedule. And the feedback you got from the NRC staff was in terms of what they needed, is that right, in terms of information?
- A. It was more two-way dialogue. And let me explain. When we had meetings, say, in January of 2008, and in June of 2008, and in August of 2008, those were technical meetings, and so it was not a one-way communication. It was a two-way dialogue of understanding more about the site, more about our application. As we had meetings with management, such as in September of 2008, we were communicating to them the importance of the schedule to us. Now, clearly their letter of October 6 is requesting more information from us.
 - Q. Okay. And so throughout that two-way

communication what you were getting back from the NRC was what they needed to do their job, right? The information they required to do their job to set a schedule that would allow for a timely and thorough review of the information?

- A. That is one element of it, but it was not just what it takes to review their schedule. They were preparing for receipt of our application, so they wanted to understand what our site was like, and so these technical presentations, including the presentation made right after the COL was submitted, was for the purposes to overview the COL application with them to facilitate their review and make it go more efficiently.
- Q. Close enough. Okay. In your Direct Testimony on Page 27 you refer to the updated fuel forecast and environmental forecast that you supplied, which are shown in your Exhibits GM-1 and GM-2. Do you see that?
- A. Yes. And just for clarity, this is my Page 27 of my May 1st, 2009.
- Q. That's correct. I am referring to -throughout this I will be referring to your May testimony.
 - A. Okay.
 - Q. So do you see that?
 - **A.** I do.

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- Q. How did you apply the information on that exhibit to any analysis in your filing?
- A. The information that is included in GM-1 and GM-2 is not used further in this filing of this May 1st, 2009 filing.
- Q. Okay. Now, on GM-2 you have a footnote that applies with respect to the CO2 cost estimates that refers to the impacts of the Waxman-Markey bill. Do you see that?
 - A. I do.
- Q. So I take it from that that the CO2 cost estimates shown there simply repeat what was filed in the need case?
- A. This information in GM-1 and GM-2 was provided through our system planning, and I would have to go back and review it side-by-side to validate your question.

 But I recall from memory in the need it was generally EPA, MIT, and other CO2 subjects.
- Q. So you don't know of whether this information was simply a repeat of the need documentation or not?
- A. Actually, I don't have anything in front of me that would actually validate that. I do not know the answer to that.
- Q. Okay. Would you accept, subject to check, that these are the values that were shown in Mr. Crisp's

1 (phonetic) exhibit in the need filing? 2 Α. Would I validate that subject to check?

Q.

Α.

Yes.

Yes.

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Okay. On Page 25 of your May testimony, you Q. begin a discussion on the feasibility of the Levy project. Do you see that?

Α. Yes.

0. And on Line 18 you say the LNP is also feasible from a project milestone perspective. Do you see that?

Α. Yes.

Q. And you mention in the next sentence that you achieved every major LNP project milestone with the exception of the LWA, is that right?

Α. That is what it says on Page 25.

Q. And the LWA was a big miss that we have already talked about, but my question is going forward, because of the LWA decision, do virtually all of the project milestones change?

Because of the -- first of all, let me go back. You said this was a big miss, and let me just point out that the LWA scope, while it is not going to be provided in a LWA approval, that LWA scope of work is embodied in the COL, so it comes in that approval.

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- Q. Okay.
- A. But to answer your second point is based on the NRC determination that the LWA would take as long as a COL, therefore, a COL will not be issued, that does mean that subsequent milestones will move.
- Q. So the expected date for the first concrete pour would change?
 - A. That's correct.
 - Q. And installing the reactor vessel?
 - A. That is correct.
 - Q. And start-up testing?
- A. All of the dates that you are describing that are associated and tied to the work that's embodied in the LWA, that work will move.
- Q. Okay. And as well as the expected commercial operation dates?
- A. The expected commercial in-service date, yes, will move also.
- Q. And you don't have specific expected dates for any of those items today, right?
- A. As I stated earlier, we have not decided on the final schedule shift and so that information is not available to date.
- Q. So when you say that the project is feasible from a project milestone perspective, you can't say that

specifically going forward because you haven't reestablished those project milestones?

- A. No, that's not what this is intended to state. This comment here, the LNP is also feasible from a project milestone perspective, this is referring to regulatory approvals that we're achieving as we execute this project. We have secured comprehensive land use amendment changes, we have secured zoning plan changes, we have secured the zoning permit itself, we have secured site certification, and all of these various regulatory approvals are being met as we go. Obviously we now know that we will not receive an LWA and that that scope of work with be in the COL, but this is referring to the fact that we are executing and getting the proper regulatory approvals as we proceed that make this project feasible.
- Q. Well, you just referred to achievements in the past tense, and I'm talking about milestones going forward. And so from a going-forward perspective, in terms of meeting project milestones, you would have to reestablish what those milestones are going to be first, wouldn't you?
 - A. Going forward --
 - Q. Yes.
 - A. -- the milestones related to the start of

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preconstruction work and then construction work through start-up extension will be reset.

- Okay. So you can't say that you are going to meet milestones if you haven't set them yet, right?
- Α. Technically, yes. But the point is from a feasibility perspective there is nothing that we see that makes it infeasible to move that milestone, say, for first concrete, secure the necessary regulatory approval to do that, and then execute that.
 - Q. You just don't know when they are, right?
- Α. We have not established the new dates for the in-service date.
- Q. Or any of the other interim milestones that I just mentioned a minute ago?
- Well, those interim milestones that are related to the execution of the construction of the plant will be established based on the in-service date because you work back from that. You allow for the start-up power extension time and then you allow for approximately 48 months of construction, and then in advance of that work that is referred to as preconstruction.

And just for the record, when I use preconstruction and construction, that is Westinghouse terminology for work done before first concrete.

not the nuclear regulatory legal version of what preconstruction and construction is.

- Q. Do you also have a milestone in terms of executing an agreement with potential joint owners or partners, or is that something you can't speak to?
- A. I can speak to it generally, and certainly Mr. Lyash, who will be providing rebuttal testimony, can give more details. But our intention is to complete negotiations on a change order to our existing EPC contract that incorporates the schedule change and then the joint owners agreements would follow behind that.
- Q. So you don't have a specific milestone for achieving agreements with joint owners anymore?
- A. That is not part of my scope of my duties, so I cannot comment on that.
- Q. That's fine. On Page 26, again, of the May testimony. On Line 7 you say that PEF continues to need base load capacity in the future. Do you see that?
 - A. Yes.
- Q. If that need for base load capacity is prior to 2018, the Levy units won't be available to serve that, will they?
- A. If there is additional generation needed before 2018 it will be provided through other generating assets, and that is covered in the Ten-Year Site Plan

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that's submitted every April.

- But in terms of the sentence in your testimony here, to the extent that -- where you say PEF continues to need base load capacity in the future and new advanced design nuclear remains the best available technology, the second part of that sentence is not available with respect to capacity needs prior to at least 2018, depending upon what the schedule slippage eventually turns out to be?
- A. To be correct in answering your question, the resource as a nuclear resource is baseload that provides all three of those things, greenhouse gas emissions, diverse energy portfolio, and reduced reliance on fossil fuels such as natural gas.
- Okay. Let's just stop to stick with my Q. question.
 - A. All right.
- Q. My question was if the capacity need is before the in-service date of the units, those units can't serve that capacity need, right?
- If there is a capacity need -- no. If the capacity need is before 2018, these units would not be available to do that.
- Okay. And that capacity need would have to be met through some other resource?

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- A. That's correct.
- Q. Okay. With respect to your comment that advanced nuclear power remains the best available technology -- do you see that on Lines 8 and 9?
 - A. Yes.
- Q. Did you do any updated analysis of other resource alternatives?
- A. In our Ten-Year Site Plan we continue to review all generations and additions every time we submit that. Is that the question you are asking?
- Q. No. I'm saying you're making a statement that advanced design nuclear power remains the best available technology, and I'm asking whether or not when you say remains there is a technical analysis that you performed to support that?
- A. I need to ask you are you asking me did we do a CPVRR to do that?
 - Q. Did you do it?
 - A. We did not in support of my Direct Testimony.
- Q. Okay. That brings me to my next question. Getting back to GM-1 and 2?
 - A. Yes.
- Q. Am I correct that GM-1 and 2 have been superseded by Mr. Lyash's rebuttal?
 - A. In an exhibit to Mr. Lyash's rebuttal there is

1	a CPVRR calculation that was requested by the staff, and	
2	in that CPVRR calculation there are updated numbers for	
3	GM-1 and GM-2.	
4	Q. Okay. So your exhibits have been superseded	
5	by the rebuttal?	
6	A. Correct.	
7	Q. Is new advanced design nuclear power the best	
8	available technology to provide reliable baseload	
9	electric service and make significant reductions in	
10	greenhouse gas emissions at any cost?	
11	A. No.	
12	Q. Is that taken into account in your analysis	
13	here?	
14	A. Yes, qualitatively.	
15	Q. Qualitatively but not quantitatively?	
16	A. Not in a CPVRR calculation.	
17	Q. Or any other calculation that you have	
18	provided?	
19	A. No, not in a calculation, but in a	
20	quantitative excuse me, in a quantitative and	
21	qualitative perspective in regards to our knowledge of	
22	the cost of the project.	
23	Q. And the cost of the project as we have	
24	discussed a number of times is currently unknown, is	
25	that right?	

Ι.	A. The cost of the project is being fevised,
2	however, we have insight to what it will be revised to.
3	Q. Okay. Is your insight to what it will be
4	revised to appear anywhere in the testimony filed in
5	this docket?
6	A. No, because that information is after this May
7	1st filing.
8	Q. Okay. So there is nothing in this docket that
9	would provide that updated information?
.0	A. There is, and it's in the context of Jeff
.1	Lyash's rebuttal testimony where in the CPVRR
.2	calculation there are some ranges for various capexs,
.3	minus 5 percent, plus 5 percent, plus 15 percent, plus
. 4	25 percent.
.5	Q. Okay. But apart from Mr. Lyash
. 6	MR. BUTLER: Mr. Chair, I'm sorry, I don't
.7	think the witness was finished answering.
.8	MR. BREW: Oh, I'm sorry.
.9	BY MR. BREW:
:0	Q. Are you done?
21	A. No, I'm not. And so in the context of the
22	fact that there is a rebuttal exhibit that is going to
:3	be discussed later, and it has additional capex ranges,
:4	based on the insight we know we are well within that
:5	range.

1	Q. Okay. Let me keep it simple. Speaking to	
2	your testimony and not Mr. Lyash's, which we will get to	
3	later	
4	A. Okay.	
5	Q is there any quantitative assessment of the	
6	updated cost?	
7.	A. Not in my testimony.	
8	Q. Okay. Or in the rebuttal that you have	
9	submitted?	
LO	A. Not in my rebuttal.	
L1	MR. BREW: That's all the questions I have,	
L2	Mr. Chairman.	
L3	CHAIRMAN CARTER: We are going to give the	
L 4	court reporter a break. Let's take ten, everybody.	
L5	(Off the record.)	
6	CHAIRMAN CARTER: We are back on the record.	
.7	And when we left Mr. Brew had finished his	
.8	cross-examination.	
.9	Mr. Davis, you're recognized, sir.	
20	MR. DAVIS: Thank you.	
21	CROSS EXAMINATION	
22	BY MR. DAVIS:	
23	Q. Good evening, Mr. Miller.	
24	A. Good evening.	
25	Q. I just have a few questions for you. I	

promise to be brief. I want to turn your attention, please, to your May 1st, 2009, Direct Testimony. Do you have that in front of you?

- A. I do.
- Q. I'm going to stick with that in the time that I have this evening. First of all, you probably are still on Page 25 in that testimony, or are you?
 - A. I am now.
- Q. Okay. You would agree, then, that Page 25 and Page 26 of your testimony, these two pages is the detailed analysis of long-term feasibility of completing a power plant that was filed by Progress on May 1st?
- A. No, I do not consider these two pages alone to be the detailed analysis of long-term feasibility for completing the power plant. These two pages summarize that. The collection of all the information provided in our Direct Testimony both on March 2nd and May 1st, which document all the actions we are talking and the achievements we have made represent that collection, and it is summarized on Page 25 and Page 26.
- Q. Well, give me some specifics then. Whose other testimony contains the detailed analysis of long-term feasibility?
- A. Sir, what I'm saying is my testimony contains that because what it's doing, it's going through and

explaining how we are taking actions to complete all the regulatory approvals, and those are happening as expected. We are following and working with the technology vendor to advance the review of that information. We are following the construction of plants in China. I have personally been there myself to witness their construction.

So we are taking all of those actions necessary to complete the power plant, and so from our perspective of all the actions we have taken and taking that into collective, those are summarized here that it is technically achievable, regulatorily achievable, also.

- Q. So those other parts of the testimony are contained within your Direct Testimony, is that what you are saying?
 - A. Correct.
- Q. So if we are looking for that detailed analysis, it is in your Direct Testimony?
- A. It is in there, and it is in there by virtue of the all the accomplishments that we have done and the fact that we are indicating that everything is moving ahead with no obstacles to complete the power plant.
- Q. And you just mentioned China. Are you relying upon the Chinese experience with the AP 1000 reactor for

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the idea that you are moving toward long-term feasibility here in Florida?

- A. I think the efforts going on -- yes. The efforts going on in China certainly relate to the long-term feasibility because it is a demonstration of the technology as it is being built demonstrating that it can be built, and it is in progress. So you certainly have to consider that. That is supportive of the technical viability of this technology.
- Q. You don't consider China's nuclear regulatory program anywhere comparable to that of the Nuclear Regulatory Commission in the United States, do you?
- A. I don't know what the word comparable means the way you phrased it, but they are different.
- Q. Is it as stringent as the NRC in the United States?
- A. I don't have insight on whether it's as stringent or not.
- Q. And do you know anything about the reputation of the Chinese officials who are part of that program?
 - A. I'm not sure what you're asking.
- Q. Do you know if any have been convicted for taking bribes, for instance?
- A. I'm aware of media reports that individuals that were involved in the down select of technologies to

deploy in China, both at the Haiyang site, the Sanmen site, and I want to say it is the Tai Cang (phonetic) site, and the decisions on whether to purchase AP 1000s or Areva EPRs, that some of the individuals involved in that decision-making of which technology to deploy, there have been allegations concerning that.

- Q. Now, going back to the long-term feasibility submittal, did Progress ask for any additional time to submit further information for demonstration of long-term feasibility of completing the reactor?
- A. No, we did not request additional time for a detailed analysis of long-term feasibility of completing the power plants because we did not need it because it is contained in my testimony.
- Q. Now, the rebuttal testimony submitted by Progress was submitted on or about August 10th, is that correct?
 - A. I have it here. Yes, August 10th.
- Q. And there's further information that I guess you are relying upon now for the demonstration of long-term feasibility in the August 10th testimony, is that right?
- A. No. The August 10th testimony is responding to the testimony that other organizations provided, and we are providing rebuttal to that, and so we are adding

some additional clarifications.

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So you're still relying then upon the May 1st submittal as your demonstration of long-term feasibility?

- Α. That is correct.
- Q. Now, with regard to the need determination for the Progress Levy 1 and 2, I'd like to quote briefly from Order Number PSC-08-0518-FOF-EI, issued August 12th, 2008. And this is on Page 24 where there is the statement that PEF shall provide a long-term feasibility analysis as part of its annual cost-recovery process, which in this case shall also include updated fuel forecasts, environmental forecasts, nonbinding capital cost estimates, and information regarding discussions pertaining to joint ownership. Let me ask you, first of all, did you provide an updated nonbinding capital cost estimate?
 - Α. Yes.
- Q. It's the same as was provided in the need docket, correct?
- A. While the number is the same, the analysis for that number is different because that number is based on a budget that was part of the integrated project plan approval that was approved in December of 2008. value is the same, approximately 17.2 billion, but it is

1	not the same analysis that was built for the need	
2	determination filing. It has been revised.	
3	Q. And it has been revised to be the same?	
4	A. Well, it was being refined and the number	
5	turned out to be the same, but nonetheless it was	
6	revised.	
7	Q. Did you provide that analysis for how the	
8	number was revised and turned out to be the same?	
9	A. We provided the IPP under discovery and large	
LO	subsections of the costs are provided in there.	
L1	Q. Okay. Now, did you provide updated fuel	
L2	forecasts?	
L3	A. We did.	
L4	Q. Did you provide updated environmental	
L5	forecasts?	
16	A. We did.	
L7	Q. Now, you're talking about the tables, Exhibit	
L8	GM-1 and GM-2?	
.9	A. That is correct. GM-1 is the fuel update and	
20	GM-2 is the environmental forecast update.	
21	Q. And I believe you just told Mr. Brew that you	
22	didn't know whether or not GM-2 contained updated	
23	environmental data for CO2?	
24	A. In the context did we add additional columns	
25	of different sources. He was asking his question in	

regard to the Waxman-Markey bill.

Q. Well, he also asked you if these were the same numbers as were provided in your need docket.

A. Oh, I misinterpreted his question. These numbers are updated from that, but I took his question to be did we change the categories of CO2.

Q. No. I must have missed something when he asked the question, because I believe you said that you would need to compare the numbers to determine whether they had been updated or not.

A. Yes, I said that. That was probably my language, but when he asked the question, I was looking at the title of the CO2, and I thought he was asking me -- because the question line had talked about the Waxman-Markey bill, was he asking about were they the same.

The numbers that are in here clearly were updated from the need determination, and I apologize if

I made that not clear before.

need determination?

Q. And I want to be as clear as we can be here. Are you stating that the numbers for EBF CO2, EPA CO2, MIT CO2, and Lieberman-Warner CO2 were updated from the

2.2

A. The overall -- I'm not sure if any individual number is updated for any particular year, but the

overall environmental forecast was redeveloped and submitted as part of my GM-2 submittal here as an exhibit, and it was performed by system planning. So it is not just a repeat of last year's. It was reviewed and updated. But I would have to look at any individual number to tell you if it has changed.

MR. BREW: Excuse me, Your Honor.

CHAIRMAN CARTER: Mr. Brew.

MR. BREW: If the witness is going to change his testimony, then I need to know that. What I asked him was to confirm that the numbers for CO2 shown on his exhibit were the same numbers as were presented in the need case. And he said subject to check, that was true. If he's changing his testimony, I need to know that.

CHAIRMAN CARTER: Well, let's ask him, again.

MR. DAVIS: Go ahead.

CHAIRMAN CARTER: Mr. Brew, you're recognized.

CONTINUED CROSS EXAMINATION

BY MR. BREW:

- Q. Mr. Miller, on your GM-2, the numbers under the column Lieberman-Warner CO2 dollars per ton, are those the same numbers that the company submitted in the need case?
- A. I would have to validate that column if they are the same numbers as the need case.

1	$oldsymbol{Q}_{oldsymbol{\cdot}}$ And if I asked you that same question for the
2	columns EBS CO2, EPA CO2, and MIT CO2, are those the
3	same numbers as the company submitted in the need case?
4	A. I would have to validate that, but the request
5	to our system planning was provide updated numbers.
6	Q. I'm not asking what your process was, I'm
7	asking if the numbers are the same?
8	A. I will have to go and validate that.
9	Q. Okay. Can you confirm that for us when you
10	reappear for your rebuttal?
11	A. Yes.
12	MR. BREW: Thank you.
13	CHAIRMAN CARTER: Thank you, Mr. Brew.
14	Mr. Davis, you may continue.
15	MR. DAVIS: That is actually all I have. And
16	thank you for that.
17	CHAIRMAN CARTER: Mr. Moyle, you're the clean
18	up man.
19	MR. MOYLE: Thank you. And I'm going to start
20	with a clean-up item that has been bothering me, but I
21	just want to have a quick conversation and see if I
22	can't clarify it.
23	CROSS EXAMINATION
24	BY MR. MOYLE:

Q. You were shown this -- it's marked as 142 by

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Mr. Rehwinkel, and I think he indicated it was an excerpt of stuff that you had submitted to the NRC, is that right?

- A. Stand by. Let me locate 142.
- Q. It is the one that has the nice graphic of the nuclear power plant superimposed.
 - A. Okay. I have it here now.
- Q. And did this get submitted to the Nuclear Regulatory Commission?
- A. I'm not sure of the source of this document based on where it came from, but this looks to be a figure out of probably either -- this is Part 6 LWA and site redress plan, which is part of the application. It is Figure 1.0-3 Rev 0.
- Q. And I have not been down to the site, but it looks like your site runs right along Highway 19, isn't that right?
- A. It is to the east of Highway 19, the site is. That's shown on Figure 2.3-10, which shows the wetlands. You can see the Highway 19 on that figure.
- Q. And it looks like the road is disconnected there, doesn't it? I mean, what's going on there, do you know?
- A. I think that is a graphic anomaly. It's not disconnected in real life.

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- Q. All right. And is this the wetlands delineation that was done for the project? I mean, wetlands delineation is a key piece of the permitting process, isn't it?
- A. Yes, it is. And this is the wetlands delineation for the purposes of this Figure 2.3-10. The actual delineation process is more complicated as you ground truth it and you work with the Corps of Engineers.
- Q. Presumably this will get updated to show exactly where things are, is that right?
- A. I would characterize it as there will be more precision added to it.
- Q. Also, you were shown Confidential Exhibit 146, which had a whole bunch of monthly progress reports in it, a compilation, and you were asked to read certain things. I have a couple of questions about that if you could put that in front of you, and tell me when you have it.
 - A. I do.
- Q. All right. The second page of the exhibit, I guess it's showing up as Page 4, it's an executive summary portion, correct?
 - **A.** Of the October 2007 report?
 - Q. Yes, sir.

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Α.	Yes.	
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- Q. And am I correct in that every one of these reports, even though it is not set forth in here, they have an executive summary portion, is that right?
 - A. Typically.
- Q. And what's the purpose of an executive summary?
- A. Typically, an executive summary in a document like this is to provide sort of a succinct overview.
- Q. And wouldn't it be true that you put in the executive summary the key components of the project?
- A. That you want to bring attention to as part of the review, you would do that.
- Q. You don't consider the labels under 1-1, 1-2, 1-3, 1-4, and 1-5 confidential, do you?
 - A. No.
- Q. And it caught my eye that cost is listed as the second matter in the executive summary, correct?
 - A. It is.
- Q. And as we sit here today with respect to cost, you are not able to provide meaningful updates of the total project cost to this Commission, correct?
- A. We cannot provide a revised total project cost based on on-going negotiations with a change order to our EPC contract. We have the latest available budgeted

cost that has been approved through our senior management.

- Q. Yes, sir. How about Page 24, Line 12. And I guess is that the point you were making where I quote until PEF is able to negotiate an EPC contract, or EPC amendment with the consortium, PEF will not be able to provide meaningful updates to the total project cost, is that where we stand today?
- A. That is correct. That statement still is correct. We have insight from the consortium on the dollar value that they estimate -- and these are indicative numbers for some of the schedule changes that we are considering. However, we have not completed the negotiations on the contract amendment, and so then to roll those and the associated payment schedules which are embodied in the EPC into a final calculation to predict total project costs, that has not been done yet.
- Q. And the way -- because I'm going to ask you some questions about the EPC contract, and you have been asked about change orders, but the way these things work it's not done with a conversation. I mean, to get this thing changed and to nail down a cost don't you have to execute either a change order or an amendment to the contract?
 - A. In this case, change orders that involve a

schedule change are a contract amendment, but they are both covered under the change order provisions of the contract.

- Q. Okay. And you have not done a contract amendment with respect to the slippage in schedule as we sit here today, correct?
- A. In regards to your term slippage, the schedule is being shifted. We have not completed a contract amendment that incorporates the schedule shift into the EPC.
- Q. And given the fact that your testimony is you can't provide a meaningful update, I would take it that it's envisioned that the ultimate resolution of this matter would be rather significant in terms of dollars, wouldn't that be a fair assumption? And I say that because Mr. Rehwinkel asked you some questions about a confidential document and had you look at some lines, and I think at the end of the day you said the percentage change was like 1/15th of one percent, was that right, when you did that analysis with Mr. Rehwinkel earlier?
- A. His question was very specific, and, yes, I answered 0.15 for the specific question he asked me.
- Q. Okay. And, you know, given the situation here, and we had some testimony yesterday that nuclear

plants are very involved, and high capital costs, and that delays are a significant risk. It's a fair assumption, is it not, that the anticipated renegotiation could have a meaningful and significant impact on the overall project costs, you would agree with that, would you not?

- A. I would not characterize it as necessarily meaningful and significant. It is certainly an impact. And until the negotiations are complete you cannot ascertain the full amount of the change whether up or down. And there's two steps in it. We first negotiate that contract amendment and then we then lay that into our total project cost calculation.
- Q. So you can't -- as we sit here today, you can't tell this Commission whether you believe that that change will be material or not?
- A. In terms of the contract negotiations on that contract change order, I have insight to the numbers have been provided by the consortium for that schedule shift, and I have stated earlier that those numbers are well within, percentage-wise, the CPVRR analysis which is provided in the rebuttal testimony by Jeff Lyash.
- Q. And the top end of that range is what, 25 percent, correct?
 - A. That is correct.

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- Q. All right. So if we use that number for the purposes of this conversation, if you assumed it was going to be at the top end of that, 25 percent of 17 billion is over 4 billion, correct?
- A. It is, but I did not say at the top end of that range. I said well within.
- Q. But the fact of the matter is as we sit here today we don't really know?
- A. We have insight that gives us the magnitude of that change, and that is prior to completion of our negotiations which we would expect improvement in that number. And so we have some insight into the percentage change in the overnight capex price.
- **Q.** In your confidential exhibit that I was referring you to --
 - A. Which one, sir?
 - **Q.** 146.
 - **A.** Okay.
- Q. There was a -- and if you will give me a minute, I'll find it, but I saw a term in here that talked about price escalation as a continuing reoccurring change. Do you have any information about price escalation as a risk?
- MR. BURNETT: Mr. Chair, I don't think
 Mr. Moyle is there yet, but I think he is dangerously

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close to disclosing material out of that confidential document by his characterizations.

MR. MOYLE: I'm sorry.

CHAIRMAN CARTER: Mr. Moyle, take a moment if you need to.

MR. MOYLE: I'm going to hold on to this and come back to it. If you will give me a minute, we'll find it.

CHAIRMAN CARTER: Take a minute. Take a minute.

MR. MOYLE: I've found it. I apologize to counsel on that.

BY MR. MOYLE:

- Q. But it's on Page -- this is on the October 2008 performance report. The number at the bottom is 1-47019373, and it's the fourth bullet point up that I wanted to ask him about. And it doesn't provide any detailed numbers or anything, but it looks to me like it's a concept.
- A. I see the item, and I'm trying to recall in the context of October 2008 what was going on then. Do you have a specific question?
- Q. Well, I think this shows up in some other reports, and it looks like it may be a carry along, but what is it that is referenced there when you use those

words?

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- In general, as the project progresses, and as we execute work, and as we turn on additional work, we are always in a realtime assessment of how much do things actually cost and are there new scope changes that would actually involve a change to the overall total project costs, and those could be either up or down. So I'll give you an example. We removed rail from the site scope of work, and that is a reduction in the total project cost.
- The use of the word in the bullet point I showed to you, and I can count, the fifth word over, that doesn't indicate down, does it?
 - A. No, that one does not.
 - That indicates up, correct?
- However, as you know and probably A. It does. understand that in some cases indices that follow that parameter may go up or down.
- Q. In your 30-plus years of being in the power business, have you typically found over the passage of time that costs go up or down?
- Α. Because of the driving of inflation, typically things do go up, but that is not always the case.
- Let me ask you a question, because I want to Q. understand the needed change to the -- you know, to the

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EPC contract. And that contract was executed on December 31st, 2008, correct?

- A. That is correct.
- Q. And there has been a lot of discussion about the LWA, and you were notified in January that you weren't going to get your LWA, and that was your testimony, correct?
- A. Yes. My testimony is that we were notified on January 23rd that the LWA would not be issued in advance of the COL.
- Q. If you had gotten that letter, that January letter where they said the LWA is not going to happen, if you had gotten it before December 31st, do you think you would have moved forward and executed an EPC contract?
- A. That subject you're asking me is covered in my rebuttal testimony.
- Q. Do you want me to hold that conversation until rebuttal?
- A. Yes, because I'm going to point to some lines in my rebuttal testimony that are confidential.
- Q. The letter of October 6th that was sent to you that said your case has been docketed, Mr. Rehwinkel read you some lines there about -- they refer to the complexity of the site characteristics. Wouldn't you

think that a fair reading of the letter, particularly the last -- or the first two paragraphs on the second page where they talk about scheduling uncertainty and, you know, staffing issues, that that's sending a signal that it doesn't look like your request is going to be able to be granted?

I mean, they specifically say, "It is unlikely that the LPN COLA review can be completed in accordance with this requested time line." I mean, isn't it a fair interpretation that they are sending you a message there that you are not going to be able to get this LWA as sought?

- A. No. We do not read that letter at all to say that we would not get an LWA. And particularly when you consider the fact that just -- this is October 6th.

 Just three weeks ahead of that we submitted a revision to the LWA scope per their request. And so certainly they were considering the LWA, because they just asked us to revise the scope.
- Q. Did anybody call Brian Anderson as he indicated in his last sentence there and said if you have any questions, please call me or send me an e-mail, did anybody follow up and say, Brian, it looks like you are not going to be able to process this per our request, could you confirm that? Was there any

conversation or discussion with respect to that?

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- A. Yes. We had on-going dialogue with Brian Anderson, and we also had dialogue with senior managers in the NRC after this letter. And in no cases did any of those individuals indicate prior to January 23rd that an LWA would not be granted in advance of the COL.
- Q. Isn't the real significant -- I mean, you signed the EPC on the 31st so that you could meet a milestone, isn't that correct?
- A. That is not correct. And there is also information in my rebuttal testimony related to that subject.
- Q. Well, I don't want to get to rebuttal now. Let's just focus on your direct, Page 25, Line 18.
 - A. Yes, I see Line 18.
- Q. You say the LPN is also feasible from a project milestone perspective. To date, PEF has achieved every major LNP project milestone with the exception of the LWA. Specifically, PEF chose a site, selected a reactor technology, obtained a need determination, applied for the SCA, applied for the COL, and executed an EPC.

Isn't it a fair reading to indicate -- to infer that executing an EPC agreement is a milestone?

A. It is, but it is in the context of it is a

necessary step in advancing the project. And if you go back to the need case that we submitted a year ago, we had given the expectation that we would conclude an EPC agreement before the end of the year. But it is a milestone from the perspective of to advance the project this is a necessary step to provide you the contractual mechanisms to advance the work both engineering-wise and long-lead engineered equipment purchasing and procurement.

- Q. So why did you -- I mean, the 31st is the end of the year, it's the last day. A lot of times people are getting ready for football games and celebrations. Why did you rush to get it done on the 31st of 2008?
- A. Well, I think the point that it was signed on December 31st does not indicate that it was rushed. We had negotiations on-going since December of 2006, so over two years of negotiations. So I would not consider it as rushed.
- Q. Fair point. Was there a negative consequence if you had waited and signed it on January 30th, 2009?

MR. BURNETT: Mr. Chair.

CHAIRMAN CARTER: Mr. Burnett.

MR. BURNETT: We are in an area now that is covered in rebuttal, and I believe that the question could conceivably call for confidential information.

So, again, I just wanted to alert Mr. Moyle of that fact.

CHAIRMAN CARTER: Mr. Moyle, tread lightly.

MR. MOYLE: I will. He may be able to answer it yes or no. I don't think it asks for anything specific.

THE WITNESS: So ask your question again.

BY MR. MOYLE:

Q. Do you believe that signing this on December 31st as compared to January 30th would have worked a material disadvantage to your company, given the other things that were going on at that point in time, particularly the correspondence from the NRC and other matters?

MR. BURNETT: Mr. Chair.

CHAIRMAN CARTER: Mr. Burnett.

MR. BURNETT: I'm sorry to interrupt again. I have to advise Mr. Miller not to answer that question verbally. If the Commission is interested in getting to this topic, we can point to confidential sections in his rebuttal testimony that address this. But he cannot provide a verbal response to that question one way or the other. Sorry to interrupt.

CHAIRMAN CARTER: Okay. Mr. Moyle, another question.

MR. MOYLE: I'm going to have to think about that one. Let me sleep on it.

CHAIRMAN CARTER: Take a minute. Don't sleep on it literally, but just take a minute.

BY MR. MOYLE:

- Q. Did you happen to read your company's position as set forth in the prehearing order?
 - A. I did read the prehearing order.
- Q. All right. I am going to -- I want to refer you to Page 10 of the prehearing order, and you talk about the EPC contract -- I say you, the company does.
- A. I do not have a copy of that with me here at the desk. I'm on Page 10.
- Q. Your kind counsel provided you a copy. I want to focus your attention on the last paragraph, and there's a sentence in there that says, and I quote, "In addition, the EPC contract execution provided an orderly framework for the adjustment to the schedule and the amendment of the EPC contract for such risk as the NRC decision regarding the LWA that occurred."

Now, I read that to indicate that the contract might be able to be readily amended or changed given that wording, but as we sit here today, it has been what, six, seven, eight months since the January notification that the LWA was not going to happen and

the need to renegotiate the contract became apparent, isn't that correct?

A. The time frame you are describing from the time that we suspended the work to today, that time frame is on the order of the months you talked about. But the line you point to in here, there is text in my rebuttal testimony that's related to this that's considered confidential.

- Q. Well, this isn't confidential, is it?
- A. No, this is not.
- Q. And I don't want to talk about --
- A. That is a summary level statement.
- Q. Yes, sir. And the summary statements are typically done where the parties sort of put the key things up front that they want people to really focus on, and I want to focus on this if I can. But you would agree that as we sit here today, the EPC contract that you executed hasn't worked in a way in which the amendment has been executed, correct?
- A. I would not agree with that, and it is because of the actual schedule shift itself and our company's decision on that. And I'll explain in general terms.

 As it states, the EPC contract provides an orderly framework for the adjustment to the schedule and the amendment of the EPC contract. And when it talks about

schedule, inside the EPC there is obviously -- as you can imagine, there are several dates in there. So if you were -- depending on what you are changing, the time it takes to negotiate that change order and incorporate that as an amendment to the EPC is based on the complexity of the change you're making.

In this case, we required the consortium to do a detailed analysis for us on various schedule shift scenarios, provide that to us so we can make informed decisions, and then once we set that then we go out and we finalize the change order. So it's a measure of the complexity of the change. This one is more complex because we needed an analysis to be able to make an informed decision.

- Q. Do you know was this October 6th letter from the NRC to you all with respect to your request for certain dates, was this shared with the EPC contractor? Did they have a copy of this letter, do you know, when they were negotiating?
- A. That letter is publicly available. I'm almost certain they would have reviewed it. We certainly shared with them what was in it, because we would have discussed it in routine monthly meetings.
- Q. Did any of those folks look at it and say, hey, this looks like it may not be happening as

1 originally sought?

- A. I'm not sure what you mean by is happening, but none of them said we read this letter to say we will not get an LWA approval for this site.
- Q. Did you all consider dropping the C out of the EPC?
- A. Yes. In the early stages, as we were considering the contract structure for EPC and EP and C, we did consider both, however, we went with EPC.
 - Q. And why did you make that decision?
- A. We made that decision because these are very complex facilities that require a great degree of interaction between the engineer and the procurement organization, which is typically the engineering organization, and also the constructor. This is a heavy modualized facility meaning that you have got engineering and procurement and construction going on at remote locations and then these modules are coming to the site. And we felt like that if we had multiple prime contracts, i.e., one with EP, one with the constructor, we would find ourselves arbitrating disagreements between them on scope and schedule and delays, and we chose to put this as an overall EPC and put that burden on them to work between those details themselves. And so for that reason we went with a

combined EPC contract to place the risk of those interactions on this complex plant between the parties of the consortium.

- Q. And did you select a vendor who had knowledge and familiarity with the AP 1000 design?
 - A. Westinghouse and Shaw, is that your question?
 - Q. Yes, sir.
- A. Yes, they both have extensive knowledge with the AP 1000.
 - Q. And is that important?
 - A. It's very important to us.
- **Q.** Were you here yesterday when Mr. Reed testified?
 - A. Yes, I was.
- Q. I asked him some questions about the EPC contract, and he said that -- and I'm summarizing, this is the general gist of what I took it to be, was that it made more sense to push off the execution of an EP and maybe a C contract for as long as you could to keep your options open. I take it you would disagree with his analysis?
- A. I do not know why he said what he did because I don't understand their business decision process. For us, as we looked at how to execute this work, we believed an EPC was the proper structure. We believe

that the site engineering that interfaced with the AP 1000 power block is best served in that EPC. And so, in our case, Shaw is doing the site specific design of the yard and the surfwater types and things that are connecting to the power blocks because they will be integrally involved with that as they construct the plant.

- Q. So you disagreed with his view as expressed yesterday in terms of delaying the decision on the EPC contract?
- A. From a Progress Energy perspective, I disagree.
- Q. There was also a little discussion about heavy metal forgings. Have you all made arrangements to get in line for the heavy metal forgings that apparently are only made in Japan?
- A. We have secured slots and some work has progressed in terms of procurement documents for long lead equipment, and particularly those ones that are engineered equipment, like the reactor vessel and the steam generators that require ultralarge forgings.
- Q. Have you paid a \$10 million reservation fee, or any size reservation fee to secure a slot in the queue for those items?
 - A. In our case it was not done as a reservation

fee because of our schedule. We executed an LOI in March of last year which started the procurement process for those long lead components. And so as an example, we have secured slots in a procurement process for the reactor vessel and steam generators. So ours is different because our schedule required us not just to get the reservation of a slot, but to also begin to advance the work.

- Q. You are ahead of the queue as compared to Power and Light, correct?
- A. In terms of the -- if you're talking about a queue such as in the supply chain for, like, a reactor vessel, we would be ahead of them.
- Q. Has your company made a go/no go decision with respect to the Levy Nuclear Power Project at this point?
- A. Your term go/no go is a difficult term to answer. Our company is advancing this project in deliberate steps. And that involves, as you know, executing the EPC on December of last year. Later in this process, there is a full notice to proceed that will authorize the contractor to staff up the site and begin the heavy construction, and that event has not taken place yet.
- Q. Now, you would agree that exploring strategic partnerships is something that makes sense with respect

1	to the Levy Nuclear Power Project, correct?
2	A. I would, and we said that in our need
3	determination, and we also talk about that in our
4	testimony.
5	Q. And are you there's no reason why you
6	wouldn't want to explore such a strategic partnership
7	with, in addition to munies and co-ops, investor-owned
8	utilities in Florida, correct?
9	A. We would consider joint ownership arrangements
10	with other IOUs.
11	Q. Has that been explored as we sit here today in
12	earnest?
13	A. I cannot provide those details because, as you
14	can imagine, co-owner negotiations are confidential. I
15	am I probably should just stop with that.
16	Q. As we sit here today, you don't have any
17	executed joint ownership agreements or letters of
18	intent, correct?
19	A. I am not aware of those being executed.
20	However, I'm not in the direct process of negotiation
21	with those parties, so I would not have immediate
22	knowledge of it.
23	MR. MOYLE: Can I have just a minute?
24	CHAIRMAN CARTER: Sure.
25	MR. MOYLE: Just a couple more and I think I

1 will be done.

2 BY MR. MOYLE:

- Q. Now, sir, you're familiar with the PSC rule that is informing these proceedings, correct?
 - A. I am.
- Q. And you're aware also that one component requires a -- detailed information be provided with respect to long-term feasibility, correct?
- A. Yes, I believe the phrase is detailed analysis of the long-term feasibility of completing the power plant.
- Q. Thank you. Because I have the rule, but I have misplaced it. So I appreciate that.

You don't read that to suggest that costs are not something that should be considered, do you?

- A. I do not. And I address your specific question in my rebuttal testimony. Would you like me to refer to it?
- Q. No. No, I want to wait for your rebuttal.

 We'll have another conversation then. And I guess with respect to feasibility, or, you know, prudence, there is probably different meanings of those, but you would agree, would you not, that asking this Commission to make a decision which impacts the rates that my clients and others pay, and they are charged with following the

rule, and asking them to make a decision on long-term feasibility without having a good handle on all-in project cost is a tough question to pose to them, correct?

- A. I don't agree that it is a tough question, because in this direct testimony dated May, I address specifically technology regulatory approvals. The cost is addressed in my rebuttal testimony.
- Q. And we've talked about that in terms of -well, I don't want to go back and repeat that. And you
 would agree that that cost is the same number that you
 used in your need case and that there is a pending
 contract amendment that may affect costs as we have
 discussed, correct?
- A. I would agree that there is an approved cost which is contained in my testimony on Page 25, for example, of the May testimony. I also point out that we have insight to the change based on our on-going discussions with our consortium and that insight gives us information about the cost of this project, and from that perspective, it's still feasible.
- Q. Do you have a document that reflects that insight?
 - A. We have --
 - Q. I mean, do you have a document that is

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authored by the person whose insight you are referring to?

- There is not a document, per se, of how we Α. analyzed the values. We have values for various scheduled scenario analysis which are estimated and indicative and from those values we can look at those and compare them, for example, to what's in the CPVRR calculations in the rebuttal testimony of Jeff Lyash.
- I appreciate that. And one final line. As Q. time goes on, my clients and other consumers continue to pay costs, carrying costs related to this project, correct?
 - A. Correct.
- So you would agree that delays work against the interest of the consumers as it relates from a cost perspective, correct?
 - State your question, again.
- That because there's carrying costs associated with this, that to the extent that delays occur and the delays push the ultimate in-service date out, that that works against consumer interest from a cost perspective, correct, because they'll have additional carrying costs?
- It will effect the carrying costs, and in this particular case the regulatory decision by the NRC was something they made that we now have to react to as part

Τ.	or our project execution.
2	MR. MOYLE: That's all I have, Mr. Chairman.
3	Thank you.
4	CHAIRMAN CARTER: Thank you.
5	Staff.
6	MR. YOUNG: No questions.
7	CHAIRMAN CARTER: Commissioners.
8	Redirect.
9	MR. BURNETT: No, sir. And we would move 97
10	and 98, please.
11	CHAIRMAN CARTER: Okay. Let's deal with that
12	first. Are there any objections to 97 and 98? Hearing
13	none, show it none.
14	(Exhibit Number 97 and 98 admitted into the
15	record.)
16	CHAIRMAN CARTER: Now let's go to the back
17	pages. We start I believe at 141, is that correct,
18	staff?
19	MR. YOUNG: Yes, sir.
20	MR. REHWINKEL: Mr. Chairman, after talking
21	with the company and other parties, Public Counsel would
22	move Exhibits 140 through 150, and 152. We did not
23	cross on 151 and 153.
24	CHAIRMAN CARTER: I think you got 141. Is
25	that right, staff? 140 is Progress.

1 MR. REHWINKEL: I meant 141. Did I say 140? 2 I apologize. 141 through 150. 3 CHAIRMAN CARTER: You have got to stay awake. 4 This sleep deprivation is not good for you. 5 141 through --MR. REHWINKEL: 150, and 152. 6 7 CHAIRMAN CARTER: Are there any objections? 8 MR. BURNETT: No, sir. 9 CHAIRMAN CARTER: Okay. And what about 153? 10 MR. REHWINKEL: I did not cross on 151 or 153, so --11 12 CHAIRMAN CARTER: So we don't do 151 and we 13 won't do 153, right? 14 MR. REHWINKEL: That is correct. 15 (Exhibit Numbers 140 through 150, and 152 16 admitted into the record.) 17 CHAIRMAN CARTER: Okay. Anything further on 18 direct for this witness from any of the parties? 19 MR. REHWINKEL: Mr. Chairman. 20 CHAIRMAN CARTER: Mr. Rehwinkel. 21 MR. REHWINKEL: I talked with counsel for 22 staff, and just as a housekeeping matter with respect to the confidential information that we have put out there, 23 24 and I'm nervous because we have put out so many exhibits 25 that have red covers on them.

1	CHAIRMAN CARTER: You can have my mine back.
2	MR. REHWINKEL: If it's appropriate, whatever
3	is the correct thing to do, we may need to collect the
4	documents.
5	MS. CIBULA: According to the prehearing
6	order, you are supposed to collect all the confidential
7	exhibits and the court reporter will keep the copy that
8	she has, and that will be kept in the Commission Clerk's
9	confidential files.
10	MR. REHWINKEL: Okay. With respect to the
11	parties who have signed nondisclosure agreements, is it
12	my understanding they can keep theirs?
13	MS. CIBULA: No. You're supposed to collect
14	them all and take them back.
15	CHAIRMAN CARTER: You thought you were going
16	to get rid of it.
17	MR. REHWINKEL: Okay.
18	MR. DAVIS: I'd like to ask a point of order
19	about that. I mean, if we want to keep these over the
20	evening to be able to review them in case we want them
21	to use them on cross-examination of another witness, why
22	shouldn't we be able to do that?
23	MS. CIBULA: I guess you can work that out
24	with Mr. Rehwinkel to see whether he'd be willing to let
25	you keep those documents.

T	MR. DAVIS: Okay.
2	MR. REHWINKEL: I think, Mr. Chairman, we car
3	talk to the company. It is their information that we
4	have, and we can work that out. I appreciate Ms.
5	Cibula's point about the order.
6	CHAIRMAN CARTER: Anything else before we
7	leave? Anything else from any of the parties?
8	COMMISSIONER ARGENZIANO: Mr. Chairman.
9	CHAIRMAN CARTER: Commissioner Argenziano.
LO	COMMISSIONER ARGENZIANO: Just tomorrow same
11	time, same place?
12	CHAIRMAN CARTER: Same time, same place.
L3	9:30.
L 4	COMMISSIONER ARGENZIANO: Okay. Thank you.
L5	CHAIRMAN CARTER: We are adjourned.
L6	(The hearing adjourned at 7:15 p.m.)
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1	STATE OF FLORIDA)
2	: CERTIFICATE OF REPORTER
3	COUNTY OF LEON)
4	
5	I, JANE FAUROT, RPR, Chief, Hearing Reporter Services Section, FPSC Division of Commission Clerk, do
6	hereby certify that the foregoing proceeding was heard at the time and place herein stated.
7	IT IS FURTHER CERTIFIED that I
8	stenographically reported the said proceedings; that the same has been transcribed under my direct supervision;
9	and that this transcript constitutes a true transcription of my notes of said proceedings.
10	I FURTHER CERTIFY that I am not a relative,
11	employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties'
L2	attorney or counsel connected with the action, nor am I financially interested in the action.
13	DATED THIS 10th day of September, 2009.
L 4	
L5	Charles Turist
L6	JANE FAUROT, RPR Official FPSC Hearings Reporter
L7	Official FPSC Hearings Reporter (850) 413-6732
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