Г			
1	BEFORE THI	E FLORIDA PUBLIC SERVICE COMMISSION	
2			
3		.)DOCKET NO. 041393-EI	
4	In the Matter of:)DOCKET NO. 041393-ED PETITION FOR APPROVAL OF TWO UNIT) POWER SALES AGREEMENTS WITH SOUTHERN) COMPANY SERVICES, INC. FOR PURPOSES) OF COST RECOVERY THROUGH CAPACITY) AND FUEL COST RECOVERY CLAUSES, BY) PROGRESS ENERGY FLORIDA, INC.)		
5			
6			
7	PROGRESS ENERGY FLORIDA, INC.)		
8		$\sum_{k=1}^{n} \frac{(2^{k} - 2^{k})^{k}}{(2^{k} - 2^{k})^{k}} = \frac{(2^{k} - 2^{k})^{k}}{(2^{k} - 2^{k})^{k}}} = \frac{(2^{k} - 2^{k})^{k}}}{(2^{k} - 2^{k})^{k}}} = \frac{(2^{k} - 2^{k})^{k}}}$	
9		VOLUME NUMBER 2	
10		Page 77 through 137	
11			
12	PROCEEDINGS:	HEARING	
13	BEFORE:	CHAIRMAN BRAULIO L. BAEZ	
14		COMMISSIONER J. TERRY DEASON COMMISSIONER RUDOLPH "RUDY" BRADLEY	
15	DATE:	THURSDAY, JUNE 2, 2005	
16			
17	TIME:	COMMENCED AT 9:30 A.M.	
18	PLACE:	FPSC	
19		4075 ESPLANADE WAY ROOM 152	
20		TALLAHASSEE, FLORIDA	
21	REPORTED BY:	NANCY S. METZKE, RPR, CCR	
22		င္း ကို လူ ရက္	
23		(As heretofore noted.)	
24	APPEARANCES:	(As heretofore noted.)	
25		о 2 3 7	
		<u>5 0</u>	

77

1				
2		EXHIBITS - VOLUME 2		
3	NUMBER		ID.	ADMTD.
4	#18	(Late-filed) Calculations based on cross examination		
5		hypothetical	11	
6	#19	July 1, 2004 e-mail from Roger Kramer to Dan Roeder	13	
7	#20	April 21, 2004 e-mail from Mr. Waters to John Krisp		
8		and others	16	
9	#21	(Confidential) Burns & McDonnell study	22	
10	#22	(Confidential)Gas prices in		
11		base plan	30	
12	#23	(Confidential)9/19/04 Natural Gas Supply and Variable Transportation		
13		Cost	31	
14 15	#24	(Confidential)2/11/05 Natural Gas Supply and Variable Transportation Cost	32	
16	#25	E-mail from Tom Davis to Lynn	52	
17		Taylor	46	
18				
19				
20				
21				
22				
23				
24				
25				

1 PROCEEDINGS 2 3 CHAIRMAN BRAULIO: We're back on the record. 4 Mr. Bushee, you can continue, sir. 5 MR. BUSHEE: Thank you. 6 7 CROSS EXAMINATION (CONTINUED) 8 9 BY MR. BUSHEE: 10 Mr. Waters, you will recall before the break that 11 0 we were looking at Table H-4. 12 13 А Yes. And, specifically, I'd like to direct your 14 Q attention to Line 11. 15 16 Α Okay. And if you follow that across to the far right-hand 0 17 side, you will see a number there. 18 Yes. 19 Α And that would give us a cumulative one-year 20 0 21 number? Yes, 12 months. 22 А And would I be correct that, if we multiplied that 23 0 number by five, that would give us a cumulative five-year 24 number? 25

80

1	A For the example calculation, yes.
2	Q Now under the Franklin agreement, it would be
3	possible to have more than one start in a day, would it not?
4	A It is possible, yes.
5	Q I want to give you a hypothetical; and it's, again,
6	going to be somewhat difficult, given the confidential
7	nature. But if you would look at the text that contains the
8	assumptions. Do you understand what I'm referring to?
9	A Yes.
10	Q And you will see two numbers.
11	A Yes.
12	Q If you added ten to the first number and you added
13	five to the second number, that's the hypothetical I would
14	like to have you keep in mind.
15	A Okay.
16	Q Can you readily calculate what that would do to the
17	start payment?
18	A No, not from not without some calculations. I
19	couldn't do that in my head.
20	Q Would you accept that it would significantly
21	increase the start payment?
22	A I guess I'll accept that, subject to check. Again,
23	we're only dealing with an example calculation here. I mean
24	I need to point out, in those numbers that you've pointed to,
25	if you multiplied both those numbers by 12 to get the annual

number of starts, that is a lot of starts because that's what 1 2 we're talking about. They're talking about that number or those numbers each month, and I would consider that unlikely 3 4 just in the example. 5 0 Well, the start costs would be paid by Progress' ratepayers if incurred, correct? 6 If the contracts are approved, that's correct. 7 Α And Progress wouldn't bear any risk, or Progress' 8 0 shareholders wouldn't bear any risk of those payments, would 9 it? 10 11 А The only risk would be any non-recovery risk that there might be after review of the actual operation, so 12 there's always that risk. 13 14 Would you accept, subject to check, if we changed 0 15 the assumptions, as we had discussed, that that would roughly 16 double the start payment? 17 Subject to check, as a hypothetical, I guess I can Α 18 accept that. I don't -- you know, again we're talking about an example calculation, so I'm not sure what the impact would 19 20 be. But if we doubled those -- with the numbers you've said, add ten to the first, and add -- what was the --21 Five. 22 Q Five to the second one? If you do the math -- I 23 Α don't want to give away the numbers. But if you think about 24 25 the frequency of the starts and think about that on a per-day

basis, the additions you've just made, again, is a very 1 2 significant number. We're talking about a lot of starts, essentially almost constant cycling of the unit. And I think 3 4 if you look at the experience at Progress, because we have more gas in our system than I suspect Southern does, I would 5 not expect that number of starts. If this were to use actual 6 7 numbers, I don't think we'd be in that neighborhood at all. 0 But you can't say with a certainty that that would 8 9 be a wrong number? А The additions you've made? 10 11 0 Yes. 12 Α I feel fairly certain that that wouldn't happen. Ι 13 can't -- you know, I don't have anything with me that I could 14 point to except the actual operation has not been anything in 15 that vicinity for the units that we have, and I don't suspect that that's the way this would be operated. 16 0 But we're talking about the Franklin unit and not a 17 hypothetical unit; is that correct? 18 Well, I'm talking about the Hines units, for 19 Ά 20 example, which are combined cycles of similar technology. And we do know how those operate, and I don't think we'd be 21 operating at those levels. 22 23 0 So it's your testimony that the assumption I gave you is impossible? 24 25 Α No, I can't -- can never say impossible. That's a

function of a lot of things, including the relative 1 2 relationship between gas and coal prices. But I'm saying under the assumptions, as I know them today and the 3 circumstances as I know them today, I don't foresee that 4 happening. 5 COMMISSIONER DEASON: Let me ask a question at this 6 7 point. In your opinion, would there be any material 8 difference between the number of starts for the Franklin 9 unit and the number of starts you would incur if you 10 11 engaged in the self-built option of a similar unit, 12 being a combined-cycle, gas-fired unit? THE WITNESS: I would not expect any real material 13 There may be a small difference. In fact, 14 difference. I might expect the Franklin unit to start a little bit 15 less because of location. But since they are similar 16 technologies, I would expect similar efficiencies and 17 similar starts over the course of a year. It should be 18 verv similar. 19 MR. BUSHEE: Mr. Chairman, I would like to ask for 20 a late-filed exhibit that would do the calculations 21 using the assumptions that I have given Mr. Waters. 22 And 23 the reason I'm asking for that is, because of the nature of the confidential information, it's very difficult to 24 go through this on the stand. We can't walk through 25

84

calculations or discuss it. I think that might be 1 2 helpful for the record. 3 CHAIRMAN BRAULIO: Mr. Perko. MR. PERKO: Your Honor, I'd object. I have no 4 5 opportunity to cross examine the witness, or -- I 6 mean --7 CHAIRMAN BRAULIO: I'm sorry? MR. PERKO: I'd have no opportunity to cross 8 9 examine the witness on direct or after the hearing. Ι mean it's -- I'd have no basis to test the assumptions 10 in the late-filed exhibit. 11 CHAIRMAN BRAULIO: Is there any way -- the subject 12 open on redirect, if you've been following the cross 13 examination. To that extent, what would be your 14 15 continuing objection to the late-filed exhibit, if 16 it's -- if what we're talking about -- and, Mr. Bushee, you can correct me if I'm wrong -- if what we're talking 17 18 about is a mere calculation using different assumptions. 19 MR. BUSHEE: If I may, Mr. Chairman, I'm not sure 20 Mr. Perko understood. I'm not asking for Mr. Brubaker 21 to do that but rather Mr. Waters to provide that 22 information, so there would be no need for Mr. Perko --CHAIRMAN BRAULIO: Mr. Perko, was that your --23 MR. PERKO: I misunderstood, Your Honor, but I 24 would also question the relevance of the exhibit given 25

85

the fact that the testimony is that these are examples and not real data.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

25

CHAIRMAN BRAULIO: Well, and I think that that's been made clear by the witness, but I'm not about to disallow the exhibit based on relevance. I think it's relevant to the hypothetical that Mr. Bushee properly set out for his purposes, and I'm going to allow the late-filed exhibit to be constructed, if Mr. Waters can at least give us some time frame as to when he can produce that.

THE WITNESS: Well, I guess that will depend on how long the hearing goes, but I think based on --

CHAIRMAN BRAULIO: It won't be going long, I hope. THE WITNESS: I hope not either. Based on this table, I think I can do that -- turn that around in a day or so. It shouldn't be --

17 CHAIRMAN BRAULIO: Okay. We'll mark the late-filed 18 exhibit as Number 18, and it will be identified as a 19 late-filed exhibit showing calculations based on cross 20 examination hypothetical.

21 MR. BUSHEE: Mr. Chairman, as I understand the 22 exhibit, it would simply take this table and change the 23 assumptions to the ones that I had mentioned during 24 cross examination.

CHAIRMAN BRAULIO: Right. And that's --

1 Mr. Waters, are you clear on that? 2 THE WITNESS: That's my understanding. Just to be 3 clear, I want to make sure I've got the right numbers: Add ten to the first number; add five to the second 4 number. 5 6 MR. BUSHEE: That is correct. 7 THE WITNESS: Okay. CHAIRMAN BRAULIO: Are we clear? Show that marked 8 as Exhibit 18. 9 CHAIRMAN BRAULIO: Go ahead, Mr. Bushee, I'm sorry. 10 11 BY MR. BUSHEE (Continuing): Mr. Waters, am I correct that Progress does not pay 12 0 13 start costs when it enters into a purchase agreement with a 14 OF or qualified facility? No, that's not necessarily the case. Each contract 15 Α would be different, but I have seen examples of contracts 16 that charge start-up costs, particularly as I mentioned, with 17 gas turbines, for example. 18 Does Progress have a standard QF agreement? 19 0 There is what's known as a standard-offer contract 20 Α 21 that's offered at regular intervals, which is available to 22 certain QFs. So I guess, in that sense, that would be a standard QF contract. Now when it comes to negotiated 23 contracts with any other QFs or other facilities, there would 24 not be a standard form necessarily to that. 25

87

C & N REPORTERS TALLAHASSEE, FLORIDA (850)697-8314

Does the standard offer contain start costs? 1 0 2 I'm not familiar enough with the standard offer, Α 3 Mr. Bushee, to tell you whether or not it includes start But it is limited to very small facilities, and I 4 costs. think it's probably a much simpler type of contract than you 5 6 would see with a larger facility. If we provided a copy of the standard offer to you 7 0 during the break, would you have an opportunity to determine 8 whether start costs are included? 9 10 А Sure. I'll leave that question for now then. 11 0 We started this line of questioning with an e-mail 12 13 from Mr. Roeder. Do you still have that handy? 14 Α Yes. Would you read for me aloud the last sentence of 15 0 the first paragraph which begins with, "These 16 17 considerations?" "These considerations may be something we want to 18 А look at with a more detailed production costing model 19 analysis like we do when we are evaluating RFPs." 20 MR. BUSHEE: Mr. Chairman, I'd move for admission 21 of this e-mail which has been marked as Exhibit 17. 22 CHAIRMAN BRAULIO: Mr. Bushee, we can take the 23 exhibits up at the end of the -- that's usually what we 24 do is, just take them all up one by one. That will give 25

C & N REPORTERS TALLAHASSEE, FLORIDA (850)697-8314

Mr. Perko a chance to respond, and we won't be bogged --1 we won't bog down the cross examination that way. 2 MR. BUSHEE: Thank you, Mr. Chairman. 3 BY MR. BUSHEE (Continuing): 4 Mr. Waters, I'm going to show you another e-mail 5 0 6 which I will ask be marked as Exhibit 19, and this is a 7 July 1, 2004 e-mail from Roger Kramer to Dan Roeder, and I'll pause for a moment while we're providing copies of this 8 document? 9 CHAIRMAN BRAULIO: Show that marked as 19. 10 MR. BUSHEE: Mr. Chairman, I would also like to 11 inquire before I start whether Progress believes this 12 13 e-mail to be confidential. CHAIRMAN BRAULIO: Mr. Waters, have you --14 15 THE WITNESS: I would say no, Commissioner. Ι 16 don't see anything in here that reveals any of the specific contract. I don't believe it's --17 CHAIRMAN BRAULIO: Then I'd ask Mr. Perko to just 18 confirm. 19 MR. PERKO: That's my understanding, Mr. Chairman. 20 I would note that the spreadsheet, which is not 21 attached, would have confidential information, so if 22 23 that --CHAIRMAN BRAULIO: To the extent we've made that 24 clarification, the e-mail transmission itself is not 25

1 confidential and you can treat it as such, Mr. Bushee. 2 MR. BUSHEE: Thank you, Mr. Chairman. We will not inquire on the attached spreadsheet, so we shouldn't 3 wander into any problems. 4 5 CHAIRMAN BRAULIO: Very well. Show that marked as 6 19, if I hadn't done so before. BY MR. BUSHEE (Continuing): 7 8 0 Mr. Waters, do you have what has been marked as Exhibit 19 in front of you? 9 Yes, I do. 10 Α Would you please look at what is the second 11 0 12 paragraph under the file attachment? It's a sentence that begins: "I also do not see." 13 14 А Yes. Would you please read just that one sentence aloud, 15 0 the first sentence? 16 It says: "I also do not see any evidence that 17 Α supports that this is a good deal or that even Southern 18 thinks the pricing is lower cost than ours." 19 20 Q Would you look at the last paragraph? There is an 21 acronym SPOD. Could you tell me what that stands for? System planning and operations department. А 22 0 And could you tell me what BAP? 23 Business analysis package. 24 Α I'm sorry? I didn't hear. Q 25

Business analysis package. 1 Α Business analysis package? 2 Q 3 Α Yes. And would you read the second sentence of that last 4 0 paragraph beginning with "Our analysis?" 5 Α Our analysis has shown that this is not an economic 6 7 deal, other considerations aside; therefore, someone else is going to have to carry -- to carrying the water on this one. 8 Could you tell me who Vinnie is in this paragraph? 9 0 The reference is to Vinnie Dolan who is vice 10 А 11 president of regulatory at Progress Energy. 12 0 And who actually approved Progress entering into 13 these agreements? 14 А There is a rather comprehensive approval process. 15 It goes through several steps, so no single individual 16 approves it. There is first a management review. The 17 business analysis package referred to is a standard presentation of both purchases and sales. It goes through 18 19 management review which requires, I would say, without having the document, probably some -- 20 some signatures. 20 It then goes to a risk management committee for their sign off, and 21 22 then it goes -- ultimately, at this magnitude, it went to the 23 board of directors for approval. So it went through several 24 steps. At the very top of the e-mail you see the words 25 0

C & N REPORTERS TALLAHASSEE, FLORIDA (850)697-8314

1 "well said." 2 А Yes. 3 0 And that message was from Roger Kramer? 4 А That's correct. 5 0 Can we correctly infer that Mr. Kramer agrees with Mr. Roeder? 6 7 MR. PERKO: Objection, Your Honor. Calls for speculation. 8 9 CHAIRMAN BRAULIO: Can you restate your question? 10 BY MR. BUSHEE (Continuing); 11 Do you believe that Mr. Kramer agrees with the 0 12 observations that Mr. Roeder has made? MR. PERKO: Your Honor, the document reads for 13 itself. I don't think Mr. Waters can get in the mind of 14 15 Mr. Kramer. 16 CHAIRMAN BRAULIO: I'm going to sustain the 17 objection. 18 MR. BUSHEE: I would like to mark -- I would like 19 to mark as Exhibit 20 an April 21st, 2004, e-mail from 20 Mr. Waters to John Krisp and others. And we'll pause 21 for a moment while we're distributing copies of this 22 document. 23 CHAIRMAN BRAULIO: Mr. Bushee, will you be seeking confirmation of some confidential treatment? 24 25 MR. BUSHEE: Yes, Mr. Chairman. I will ask whether

1 the e-mail is confidential and if the attachment is 2 confidential. If the attachment is confidential, I 3 believe we can do it just with the e-mail. I would say the e-mail is not THE WITNESS: 4 confidential. I believe there is some confidential 5 material in the presentation itself. I'd have to go 6 7 through it, but I'm pretty certain there's some in the presentation. 8 9 CHAIRMAN BRAULIO: Mr. Perko. MR. PERKO: That's my understanding. 10 CHAIRMAN BRAULIO: And no objection to treating the 11 e-mail as non-confidential? 12 MR. PERKO: The e-mail itself, no. 13 CHAIRMAN BRAULIO: Very well. 14Mr. Bushee, the e-mail itself can be treated as not 15 confidential. The attachment -- the attached, I guess 16 it would be a presentation it seems, is still 17 confidential. 18 MR. BUSHEE: At this point I think the easiest way 19 20 to avoid running into trouble would be to simply mark the exhibit as the e-mail without the attachment 21 22 CHAIRMAN BRAULIO: Do you want -- Very well. We can do that. Show Exhibit 20 to be only the e-mail. 23 As listed and not include the attachment. 24 25 BY MR. BUSHEE (Continuing):

1	Q Mr. Waters, do you have the e-mail in front of you?
2	A Yes.
3	Q Would you look at the second bullet excuse me,
4	the third bullet, the one that begins with pet coke?
5	A Pet coke, yes.
6	Q Would you tell me what pet coke stands for?
7	A Petroleum coke. It's a petroleum byproduct that is
8	roughly a coal substitute.
9	Q And would you tell me what IGCC stands for?
10	A Integrated coal gasification combined cycle.
11	Q And would you tell me what AFB is?
12	A Atmospheric fluidized bed.
13	Q That bullet says that more study is required. Has
14	that study been done?
15	A We are in the process of running through this
16	entire study looking at everything from pulverized coal and
17	nuclear to the alternative options in this year's planning
18	cycle, so that's currently underway.
19	Q Would you read the bullet that appears right below
20	the one that we just talked about?
21	A Beginning "fuel diversity?"
22	Q Yes.
23	MR. PERKO: Your Honor or Mr. Chairman, I'd just
24	insert an objection. I think we're going to be here all
25	day if we have the witness reading e-mails over and over

1 again. I think the documents speak for themselves. 2 CHAIRMAN BRAULIO: That's the normal practice. I'm going to overrule the objection. 3 Go ahead, Mr Bushee. 4 BY MR. BUSHEE (Continuing): 5 Mr. Waters, would you please read the bullet that 6 0 begins with fuel diversity? 7 Α "Fuel diversity may be a problem, but it's not ours 8 9 to solve. FPL is in much worse shape. We should not take 10 the lead in fixing the state." 11 0 Is it Progress' position that the Commission should simply ignore fuel diversity? 12 Absolutely not. I think it's a broader issue than 13 А just for Progress or any one utility. I think that's the 14 point of this, is that it needs sort of a combined look to 15 16 see how we might address fuel diversity in the state. 17 0 Would you agree with me that the price of natural gas has been volatile over the last five years? 18 19 Yes, I guess under generally accepted definitions Α of that term I would call it volatile. 20 Are you familiar with the term "sensitivity 21 Q 22 analvsis?" 23 Α Yes. 24 0 And would you agree with me that a sensitivity 25 analysis is an analysis done to see how an end result would

1 2 be affected if a certain variable is changed?

A Yes.

Q For example, a sensitivity analysis of the price of natural gas could determine how the price of power under one of these agreements would be affected by changes in the price of natural gas?

I'm sorry. I had a little trouble picking that up. 7 А I think I would agree with the statement that it would affect 8 the price of the agreement. It would also affect, obviously, 9 the cost of the self-build plan, if what you're talking about 10 is just varying natural gas prices. I think you have to look 11 at what we're comparing here. If I compare, for instance, 12 Franklin, to my self-build option, gas prices would affect 13 14 both equally. My expectation would be as higher gas prices -- the only non-moving part to that analysis is the 15 Scherer portion, the coal portion, so that the deal ought to 16 improve with higher gas prices. 17

18 Q With respect to -- and I think we're all going to 19 have to talk into the microphones as the ventilation -- Are 20 you able to hear me okay?

21

A Yes, that's fine.

Q Okay. With respect to the proposed agreements,
Progress did not perform a sensitivity analysis concerning
the price of natural gas, did it?

25

A That's correct. But basically for the reasons I

just gave. If I -- comparing two options, for example, 1 combined cycle to combined cycle, raising gas prices has very 2 little impact on the relative impacts; and knowing I have a 3 coal portion here and I do not have coal in that five-year 4 window in the self-build plan, my expectation would be that 5 the Southern deal would look better as gas prices go higher. 6 7 MR. BUSHEE: Mr. Chairman, I'd move that the answer be struck. I simply asked him if they performed a 8 sensitivity analysis. 9 CHAIRMAN BRAULIO: Mr. Bushee, I think it's -- in 10 our practice, it's the witness' prerogative to try and 11 clarify his -- allowed to elaborate his answer, and I'm 12 going to overrule the motion to strike. 13 14 And, Mr. Waters, if I can remind you as a witness, 15 that begin your answers yes or no, just to make sure that Mr. Bushee got the answer that he --16 THE WITNESS: Yes. 17 CHAIRMAN BRAULIO: Perhaps not the answer that he 18 19 wants but the answer that he needs to go forward. THE WITNESS: Yes. 20 CHAIRMAN BRAULIO: And you can go ahead and 21 elaborate as you see fit. 22 23 THE WITNESS: Okay. CHAIRMAN BRAULIO: Go ahead, sir. 24 MR. BUSHEE: Thank you, Mr. Chairman. 25

1 I would also like now to mark as Exhibit Number 21, 2 and this is a Burns & McDonnell study which has a February 5th, 2004 cover letter. The study is a solid 3 fuel resource feasibility study. 4 CHAIRMAN BRAULIO: Can you repeat the date? 5 MR. BUSHEE: The date on the cover letter was 6 February 5th, 2004. I believe that this study is 7 confidential. We are distributing copies now, and I'll 8 treat it as confidential unless counsel advises me 9 10 otherwise. MR. PERKO: I believe this study is confidential, 11 12 Mr. Chairman. 13 CHAIRMAN BRAULIO: Very well. It will remain treated as confidential and be marked as Confidential 14 Exhibit 21. 15 16 BY MR. BUSHEE (Continuing): 17 0 Mr. Waters, am I correct that this study evaluates 18 the option for developing a new solid fuel generation 19 facility in Florida? 20 Α Basically, yes. It's a costing study looking at 21 solid fuel options. There's also -- for comparability 22 purposes, they also did an estimate for combined cycle so 23 that we knew we had apples and apples for the comparison. 24 0 Would you please turn to Page 3-29? And, 25 specifically, I'm looking at Section 3.6, and I'll give you a

1	moment to find that.	
2	A Okay, I have that.	
3	Q And I'd like you to direct your attention to the	
4	text above Table 3-3, and I think I should give you a moment	
5	just to read it and become familiar with it.	
6	(WITNESS REVIEWED DOCUMENT).	
7	A Okay.	
8	Q And would you agree with me that, based on that	
9	text, the Table 3-3 that we'll talk about in a moment	
10	contains two gas price forecasts?	
11	A Yes.	
12	Q And would you tell me what those two gas price	
13	forecasts are?	
14	A According to the text, the one forecast is the gas	
15	forecast used by Progress in the Hines 4 power supply RFP.	
16	The other forecast is what they are calling a reference gas	
17	or a gas cost sensitivity forecast that Burns & McDonnell	
18	prepared.	
19	Q Now would you look at Table 3-3, and for each year	
20	after 2007, so beginning with 2008, would you agree that the	
21	reference forecast is higher than the RFP forecast?	
22	A Yes.	
23	Q And I'd ask if you could give me roughly the	
24	difference in those forecasts, pausing for a second just to	
25	make sure that nobody considers that differential to be	

Г

confidential.

1

Yes, I don't think the differential would be 2 А confidential, but I would say on the order of 20 percent 3 higher in the reference case. 4 5 Q Would you now turn to Page 4-11? 6 (WITNESS COMPLIED). CHAIRMAN BRAULIO: Mr. Bushee, that was 4 dash. 7 MR. BUSHEE: 4-11. 8 CHAIRMAN BRAULIO: Eleven? 9 MR. BUSHEE: Yes. 10 11 CHAIRMAN BRAULIO: Thank you. 12 THE WITNESS: Okay. Figure 4-7? 13 BY MR. BUSHEE (Continuing): 14 0 Yes. 15 A Okay. 16 And just to make sure we're all on the same page, 0 would you just read the caption for Figure 4-7? 17 18 Α It says, Levelized 20 Year Busbar Costs, 500 Megawatt Brownfield Sites with Alternative Technologies and 19 20 Fuels. 21 Q Now bearing in mind the confidential nature of the 22 document, I don't want to ask you any of the figures that are 23 here, would you tell me what is the highest cost technology shown on this table? 24 25 А It would be five hundred megawatt combined cycle

natural gas and I assume that means reference gas forecast. 1 2 Q And would you tell me what the lowest cost 3 technology is? Five hundred CFB, which would be circulating 4 Α fluidized bed, pet coke Brownfield. 5 And I'm going to ask, again, subject to any 6 0 7 concerns that the answer may be confidential, if you can tell me what the differential is between those two alternatives. 8 And if there's any doubt, just -- we'll move on. 9 Between the two, roughly, again, 20 percent, I 10 А think, in the figures on here. I have to point out though 11 that, you know, in interpreting these graphs, when it says 12 levelized busbar costs, you have to be very careful 13 interpreting these numbers because these are not comparable 14 to what you would get in a -- even a less detailed model like 15 Strategist. Because these, as it says, are levelized busbar 16 17 costs. This is what we would refer to in our process as 18 screening curves. You normally do not compare different 19 technologies in screening curves. You compare like 20 21 technologies. Like coal options could be compared using screening curves because they all have the relative 22 same -- relatively same fuel cost. 23 24 Once you have different fuel costs, you have to 25 account for the fact that they have different capacity

1 factors when they are finally put in the system, and that 2 will change the economics; and this does not show that. So 3 you cannot read from this that any particular result will come out of a detailed economic analysis. 4 Wouldn't you expect that a base-load coal unit 5 0 6 would have a higher capacity factor than a combined cycle 7 unit? 8 Α Yes, and I think that's my point; that given that, if you compare them at equal capacity factors, you're going 9 to get very different looks at the economics. It will not 10 give you a true picture of the overall economics in comparing 11 12 the two. 13 Let's turn to Page 4-12 and Figure 4-8. 0 14 Α Okay. 15 And just so that we're all on the same page, so to Q 16 speak, would you just read the caption for 4-8? 17 Α The caption is: Levelized 20 Year Busbar Costs, 18 1000 Megawatt Brownfield Sites with Alternative Technologies 19 and Fuels. 20 And what is the highest cost technology? 0 21 Α The five hundred megawatt combined cycle gas 22 turbine natural gas reference, if I'm reading the 23 abbreviations correctly. And what is the lowest cost? 24 0 A thousand circulating fluidized bed, pet coke 25 Α

1	Brownfield site.		
2	Q Is it your understanding that when the well,		
3	strike that. Let me ask it this way: Do you believe that in		
4	comparing the technologies that the same capacity factor was		
5	used?		
6	A Frankly, I'm not sure what was used in this		
7	analysis. This is Burns & McDonnell's analysis. And we did		
8	very detailed analyses on these technologies, which is, you		
9	know, what we were in control of and what we ran. And this		
10	in no way relates to the studies that we ran other than we		
11	used some of the inputs from this study.		
12	Q And this study was performed on behalf of Progress		
13	Energy, was it not?		
14	A Yes.		
15	Q I would like to would you please turn to Page		
16	1-14? Do you have that in front of you?		
17	A Yes.		
18	Q And you'll see a number of bullets at the top of		
19	the page.		
20	A Yes.		
21	Q And those represent key milestone dates working		
22	backwards from a January 2011 commercial operation date to		
23	construct a new solid fuel generation resource; is that		
24	correct?		
25	A Yes.		

1	Q And do those series of bullets reflect a seven-year
2	period from the initiation of the siting study to commercial
3	operation?
4	A That's correct.
5	Q Has Progress initiated any siting studies for solid
6	fuel facilities?
7	A Yes, we have.
8	Q And which would those be?
9	A I'm sorry. What was the
10	Q And, again, if this is confidential information,
11	please let me know.
12	What siting studies has Progress initiated?
13	A Without getting into details, it's basically a scan
14	of Florida to find suitable sites from a transportation
15	issue, from a water perspective, from a transmission
16	perspective. So it's basically a screening of potential
17	sites for coal technologies.
18	Q And when did Progress initiate that study?
19	A That was initiated my group does not do the
20	siting studies, let me put that caveat on it. I believe it
21	was initiated after we completed our base-load studies last
22	year, at the end of 2004, so basically the start of 2005.
23	Q Has Progress done any initial environmental work
24	for a coal or excuse me, solid fuel facility?
25	A When you say initial environmental work, are you

talking about site-specific environmental work? 1 2 Q Yes. No, we've not selected a site at this point. 3 Α 4 0 And you haven't done any initial permitting work, 5 obviously? 6 А Correct. 7 Could I ask you a question, Mr. Bushee? Is there 8 a section missing from this report? I was looking for Section 7. 9 I don't believe there is. If it is, it's not by 10 0 11 design. 12 А I hope we didn't provide it that way. 13 0 I've just been informed that the answer is we were not provided with a Section 7. 14 15 Okay, and I assume that the -- okay. Well, there's Α nothing then I can do with Section 7. It had that same 16 schedule in it that you referred me to. 17 Okay. I think we'll move on to a new document. 18 0 19 And as we're getting ready to pass that out, let me ask you a question. In evaluating the proposed UPS agreements, 20 Progress developed a base case, correct? 21 22 Α Correct. A base case, you're referring to 23 base -- what I would call a self-build resource plan? 24 Yes. Is it correct that is what Progress would do 0 25 absent the UPS agreements?

105

C & N REPORTERS TALLAHASSEE, FLORIDA (850)697-8314

ſ	
1	A Yes.
2	Q Okay.
3	MR. BUSHEE: I would like to mark as Exhibit 22 a
4	document that was provided in discovery, and it has a
5	cover sheet on it that says Gas Prices Used to Develop
6	Base Plan Used in UPS Analysis. Now that is not part of
7	the document. That's the cover sheet that identifies
8	what's attached. We'll take a moment as that's being
9	handed out.
10	MR. PERKO: Mr. Chairman, I believe
11	CHAIRMAN BRAULIO: Mr. Perko.
12	MR. PERKO: The first three columns or first
13	four columns after the dates are confidential, is my
14	understanding.
15	THE WITNESS: That's my understanding as well.
16	That should be confidential.
17	MR. BUSHEE: I'm now told that the cover page I
18	thought was on it is, in fact, not there so this exhibit
19	has the caption Natural Gas Supply and Variable
20	Transportation Cost, and it's further labeled 0401
21	3/08/04 revision.
22	CHAIRMAN BRAULIO: Show that marked as confidential
23	Exhibit 22.
24	Mr. Bushee, did you hear the did you hear the
25	clarification on this particular exhibit? It is the

106

1 first four columns in particular that are confidential, 2 first four columns after the date. 3 MR. BUSHEE: Yes, I did, Mr. Chairman. 4 CHAIRMAN BRAULIO: Okay. 5 MR. BUSHEE: I'm also going to ask to mark as 6 Exhibit 23 a document which is captioned Natural Gas 7 Supply and Variable Transportation Cost, and this one says 0404 09/19/04 Revision. 8 9 MR. PERKO: Mr. Chairman, I believe the same four columns would be confidential on that document as well 10 11 as the last two. 12 THE WITNESS: Actually it would be the first five 13 columns, I think, on this second exhibit. 14 CHAIRMAN BRAULIO: Can you speak up, Mr. Waters? 15 THE WITNESS: I'm sorry. I think the first five 16 columns on Exhibit 23 -- there's an extra column under 17 the heading Base Cost compared to the Exhibit 22. So I 18 think the first five columns would be confidential. CHAIRMAN BRAULIO: The first five and the last two? 19 20 THE WITNESS: And the last two. CHAIRMAN BRAULIO: Mr. Bushee, are you clear? 21 22 MR. BUSHEE: Yes, I am. 23 CHAIRMAN BRAULIO: Show that marked as Exhibit 23. 24 MR. BUSHEE: And then, finally, I would like to 25 mark as Exhibit Number 24 a document that's captioned

Natural Gas Supply and Variable Transportation Cost. 1 2 And this one right under the caption says 02/11/05 April 2005 GFF. 3 4 THE WITNESS: And, Commissioners, in Exhibit 24, it 5 would be the first six columns, if they were adding 6 another source, as well as the last two that are confidential. 7 8 CHAIRMAN BRAULIO: Show that marked as Confidential Exhibit 24. 9 10 Go ahead, Mr. Bushee. Ask your questions. BY MR. BUSHEE (Continuing): 11 12 Mr. Waters, do you have Exhibits 22, 23, and 24 in 0 13 front of you? 14 А Yes, I do. At no point during the questions am I going to try 15 0 16 to ask for an answer that has a numerical answer. 17 А Okay. 18 So if you perceive that's what I'm asking, please 0 ask me to clarify because that way we can be sure we don't 19 20 get into confidential. I think the best way to start is I'll ask you what 21 each of these documents is so that we're all understanding 22 Turning first to Exhibit 22, am I correct that that is 23 them. 24 the base plan natural gas forecast? 25 А When you say the base plan, you're referring to the

1 analysis done versus the Southern UPS agreements, that plan? 2 0 Yes. Α I believe that's correct, yes. 3 And when I look at Exhibit 23, am I correct that 0 4 that is a Progress gas price forecast from September of 2004? 5 А Yes. 6 And when I look at Exhibit 24, am I correct that 7 0 that is a Progress gas price forecast from February of 2005? 8 It says February. I believe it's probably March. 9 Α It says at the bottom -- the signatures on it were in March, 10 so I guess that's when it became more official. But that's 11 12 basically correct, yes. 13 0 Thank you. What I'd like to do is to compare the various 14forecasts. And, again, so as not to get specific numbers, 15 16 perhaps we can get a sense of the magnitude of the 17 difference, whether you care to express it as a percentage or an actual number. Probably a percentage would be best. 18 Looking at the year 2007 on each of these 19 documents, can you tell me how far -- or how much the 20 projected gas prices increased from the base plan in Exhibit 21 22 to the September 2004 forecast which is Exhibit 23? 22 Yeah, I will use the column entitled Regular Supply 23 Α 24 Cost, the third column, to do the comparison. 25 0 That would be good.

1	A Looking at 2007, let's say, the September revision
2	is roughly 20 to 25 percent higher.
3	Q And then would you compare the base plan in Exhibit
4	22 against the February or March '05 figure in Exhibit 24?
5	A For 2007?
6	Q Yes.
7	A Okay. The April or the March, or February,
8	forecast for 2005, I would say is roughly 60, 65 percent
9	higher than the Exhibit 22 in 2007.
10	Q And let me assure you, I'm not going to do this for
11	every year, but would you do the same comparison for the year
12	2008?
13	A Okay, 2008, going from the Exhibit 22 to
14	Exhibit 23, about a 10- to 12-percent increase. Going from
15	Exhibit 20 was it, 22 to 24 is the other comparison?
16	Q Yes.
17	A Okay, 22 to 24, in 2008, again, roughly, 55-,
18	60-percent, somewhere in that vicinity, increase between the
19	two.
20	Q And then just one last comparison, if you would do
21	the same comparison for the year 2015.
22	A 2015, again, using the same column, going from
23	Exhibit 22 to 23, a 15- to 20-percent increase from 22 to 23.
24	From 22 to 24, I'll say about 45-percent-or-so increase.
25	Q Thank you.

MR. BUSHEE: I have no further questions on these 1 documents, Mr. Chairman. I'll ask the same question 2 again. I'm about to change to a new line. 3 CHAIRMAN BRAULIO: Commissioners, what's your 4 5 pleasure? Would you like to break for lunch for 45 minutes? Will that work for you? I think this is 6 7 probably a good time to take a 45-minute break, and that will let everyone regroup, and we'll come back at 12:45. 8 MR. BUSHEE: Thank you. 9 CHAIRMAN BRAULIO: We're in recess. 10 11 (LUNCH RECESS). 12 CHAIRMAN BRAULIO: We'll go back on the record. 13 Mr. Bushee, we were still on Mr. Waters' cross. 14 BY MR. BUSHEE (Continuing): 15 0 Mr. Waters, would natural gas prices affect the 16 base plan? Because of uncertainty over the schedule of a coal 17 Α 18 unit, I would say probably not. What the base plan shows is 19 from 2015 on its all-coal units essentially. There is a 20 combined cycle stuck in there somewhere, but it might affect 21 it beyond 2015. I would not expect to see it have much 22 impact before 2015 because of scheduling more than economics. 23 I think we have some questions about whether seven or eight 24 years is a reasonable estimate for scheduling on a coal unit. 25 But given that, the only way it could affect the time period

1 prior to 2015 is if we assume that we can basically get a 2 coal plant in quickly. Has Progress rerun its base plan using more 3 0 up-to-date gas forecasts such as we discussed just before the 4 lunch break? 5 Yes, and the base plan is very similar except now 6 Α 7 there are no gas units beyond 2015. It's basically all coal 8 from that point forward. Progress' cost benefit analysis in this proceeding 9 0 does not include any cost for transmission upgrades, does it? 10 Speaking specifically of the Southern purchases? 11 А 12 Q Yes. That is correct, no cost for transmission upgrades. 13 Α To implement the Franklin agreement, Progress has 0 14 15 requested Southern to redirect the path of its rollover 16 rights from the existing Miller and Scherer units, has it 17 not? Redirect from Miller, not Scherer, that would be 18 Α 19 correct. Yes. For Southern to determine whether it can redirect 20 0 transmission, it has to perform what's known as a system 21 impact study, does it not? 22 23 Α Yes. And you've requested Southern to perform such a 24 0 study? 25

1 Yes, we have. There's a roughly 60-day period А 2 where they have that time to perform the system impact study, 3 and we're within that window now. 4 0 When does the 60-day period expire? 5 Α I don't know from memory, Mr. Bushee. I'd have to go look at the overall schedule, but I think we're about two 6 to three weeks into the 60-day schedule now. 7 Would you accept, subject to check, that Progress 0 8 9 signed the system impact study letter with Southern on April 10 25th? 11 А That sounds right, yes. 12 Q Then give or take a day, the system impact study should be done on or about June 25th? 13 14 А That's about right, yes. 15 Now one possible result of the system impact study 0 is that Southern could say that transmission is not available 16 in sufficient amounts; is that correct? 17 That's correct, yes. And that condition is covered 18 Α 19 in the contract, if they should come back and say we cannot -- we do not have adequate transmission or that system 20 21 upgrades are required. That is addressed specifically in the contract. And I don't want to give away any confidentiality 22 23 provisions, but if you were to look at Section 7.4.2 of the Franklin contract and 7.4.3, it goes through a series of 2.4 25 steps what happens at that point should we find that either

1 transmission is not available or that significant upgrades 2 are required. And there are some remedial actions that could 3 be taken that basically protect Progress' customers from any 4 additional costs.

Q Well, without referring to the contract and potentially raising confidential issues, just as a matter of common sense, if there's no transmission, then you can't take power under the Franklin agreement, can you?

9 A That being the case, yes. And in that event, if we 10 cannot take power, the contract is basically void at that 11 point.

12 Q So we don't know sitting here -- in fact, we won't 13 know until roughly June 22nd whether a condition precedent 14 for this contract has been satisfied?

A Correct. I want to point out what happens if it goes the other way. I think it's fair to point out that the Franklin plant, if you look at it's location versus Miller, it's essentially between Miller and us, so you -- you know, a common sense approach might be to say that it's on the transmission path and there's probably -- power is going to flow in the same direction.

But whether or not that's the case, if Southern comes back and says there's no impact, we are expected to work out a final transmission agreement within 15 days of that notification. And that's in their tariff. So at that point we own the transmission, and we're either going to have to sign on or give it up. I see those as our only alternatives, and in that case we would have lost the rollover rights that we exercised.

Q In addition to Southern possibly saying there isn't transmission, Southern could also come back and say that certain system improvements are required, could it not?

A Yes.

1

2

3

4

5

6

7

8

9 Q And if system improvements are required, Progress
10 would have to pay for those; is that correct?

No, I don't think that's correct. I think if you 11 А go to the provisions of the contract, there is -- I guess the 12 way to put it is we might pay for some of the upgrades, but 13 there are some offsets potentially in the contract. So the 14 net of it could be zero cost, and we wouldn't know that, of 15 course, until we knew the upgrades; but that gets into the 16 17 specific terms of the contract. Yes, we could pay for the upgrades, but there are other provisions that may alleviate 18 19 that.

20 Q And I guess part of the answer is that the 21 provisions may alleviate but won't necessarily alleviate 22 additional costs?

A Well, to the extent they don't, again, it calls into other provisions of the contract. But, ultimately, we have outs in this contract. I guess that's the way to look

1	at it. If the total costs of these upgrades are to the point
2	where they well, I'm getting too specific on the terms.
3	But at some point we have outs, I'll put it that way.
4	Q By out, do you mean that you could terminate the
5	contract?
6	A Yes.
7	Q But we won't know until roughly June 25th whether
8	the whether system improvements would be needed such that
9	you would want to terminate the contract?
10	A Yes, I think that's well, we may know earlier,
11	but their deadline should be June 25th.
12	Q And if there was no transmission to facilitate
13	these agreements, then the Commission would really have
14	nothing to decide, would it?
15	A You're assuming we cancel the contract at that
16	point?
17	Q Yes.
18	A Yes, there would be nothing to decide if we were to
19	cancel the contract.
20	Q And if the costs associated with system
21	improvements, and recognizing that we don't know whether
22	there will be, but if there were costs significant to cause
23	Progress to terminate the agreement, the Commission would
24	have nothing to decide, would it?
25	A That's correct.

1	Q We talked about the Strategist model earlier. Do
2	you recall that conversation?
3	A Yes.
4	Q And would you say that you're generally familiar
5	with Strategist?
6	A I would say generally familiar. I'm not familiar
7	with specific inputs and outputs. I don't run the model, but
8	I am familiar with the way it works.
9	Q And that's where my questions are geared, is to
10	understand your level of familiarity. So you don't actually
11	do the runs of Strategist yourself?
12	A That's correct.
13	Q But you perhaps supervise the runs?
14	A Yes.
15	Q Okay. Would you agree that to really understand
16	the Progress cost benefit analysis that one would have to
17	have access to Strategist?
18	A No. I think to understand them, if you have a
19	general working knowledge of the business and you've
20	performed these studies on a frequent basis, you should be
21	able to understand the results based on the inputs and
22	outputs without having access to Strategist.
23	Q But if you wanted to see how different variables
24	affected the analysis, you'd need to do your own Strategist
25	runs?

Starting from a base case, yes. 1 А 2 0 Okay. Strategist is a proprietary model? Yes, it is. 3 А And by that, do you mean that you would have to 4 0 5 have a license to use Strategist? 6 А Either a license, or I think you can obtain access 7 to the program on a contract basis. For example, have runs either made for you or access the program on a short-term 8 basis. 9 And there would be a cost involved in doing that? 10 0 Α 11 Yes. 12 Okay. So if White Springs wanted to use Q 13 Strategist, it would have to either purchase a license or obtain access on a contract basis? 14 I believe that's correct, yes. 15 Α Who would they contact to do that? I mean the 16 0 17 company. А New Energy Associates. 18 Okay. Assuming that this is not a confidential 19 0 information, how much does it cost to get a Strategist 20 21 license? I don't know, Mr. Bushee. That would depend on how 22 Α long you wanted the term. For instance, multiple years is 23 cheaper than a single year which -- and then a month's access 24 25 may be at a different cost. And that is not in my budget, so

1	I don't pay for the program. We have another group that does
2	that. I'm not really familiar with the licensing costs.
3	Q Fair enough.
4	Would you agree that it would take some period of
5	time, whether it's days or weeks, probably days, to arrange
6	for access to Strategist if one wanted to get that access?
7	A I would agree that it might take days, and I'm
8	talking here a couple of days. I have been involved in
9	proceedings before where we have helped to expedite access on
10	a limited basis where New Energy or the predecessor made runs
11	for the client based on changes they requested in the data,
12	and that was done on a more expedited basis.
13	Q And once you obtained access to Strategist, it
14	would take some period of time, be it days or whatever, to
15	install the software on a computer system and get it running;
16	wouldn't that be correct?
17	A Yes, I think so. If you took that approach rather
18	than having them run the models for you.
19	Q And there would be some period of time to validate
20	that the model was set up correctly?
21	A Yes.
22	Q Progress ran a series of Strategist runs, did it
23	not, in performing the analysis in this proceeding?
24	A Well, yes, over a period of time. If you look at
25	the entire time over which this deal was negotiated, there

1	were there was a long series of analyses done from
2	beginning to end. And Strategist was an essential part of
3	that.
4	Q And over what period of time did you do your
5	Strategist runs?
6	A I would say around February, March '04
7	through probably through October.
8	Q I'm going to change subjects and talk about
9	Progress' consideration of alternatives or lack of
10	consideration. Progress was not required to contract with
11	the Southern Company for the power represented by these two
12	agreements, was it?
13	A No, not required.
14	Q In other words, you could have selected any
15	resource that you identified that met your needs?
16	A Generally speaking, yes. I think this is one of
17	those instances where I think we have a unique opportunity to
18	proceed, and I feel very strongly that if we don't proceed at
19	this time this deal will not be there. So when you say other
20	alternatives, it's really a matter of what's available at the
21	time. I think, from a planning perspective, my obligation is
22	to try and do what's best for customers; and we did that by
23	proceeding with this agreement.
24	Q Would you turn to your direct testimony at Page 6?
25	(WITNESS COMPLIED).

A Yes.
Q And at Line 2 and continuing from there, you state
that it's not feasible to construct a new pulverized coal
plant to meet the June 2010 target date?
A Yes.
Q And that's based on your view that Progress
requires about eight years lead time to complete all of the
required activities to bring a coal plant on-line?
A That's correct.
Q So using that estimate, you would have needed to
begin the process in 2002 to have a coal plant on-line in
2010?
A Right.
Q I'd like to mark as, I believe it's Exhibit 25, an
e-mail dated June 26th, 2003 from Tom Davis to Lynn Taylor;
and we'll take a moment to distribute copies. Again, we

2

3

4

5

6

7

8

9

10

11

12

13

14 to mark as, I believe it's Exhibit 25, an 15 6th, 2003 from Tom Davis to Lynn Taylor; 16 ment to distribute copies. Again, we understand that some or all of this e-mail is confidential, 17 18 so we'll request guidance from counsel as to whether portions may not be confidential. 19

20 Do you have the e-mail in front of you? 21 Α Yes. I'm trying to think of anything that might be 22 confidential. I think the spreadsheet, if that were used, 23 would probably have confidential information. I don't believe the e-mail has any since this is a backwards 24 25 calculation of a gas price. It's not part of the forecast,

> C & N REPORTERS TALLAHASSEE, FLORIDA (850)697-8314

1	so I think it's probably not confidential.
2	Q With that understanding, we will not ask questions
3	on the spreadsheet and simply ask some questions on the body
4	of the e-mail.
5	CHAIRMAN BRAULIO: Show that marked as Exhibit 25.
6	BY MR. BUSHEE (Continuing):
7	Q Now this e-mail forwards, does it not, a June 12th,
8	2003 e-mail from Mr. Roeder?
9	A Yes.
10	Q And would you look at the second paragraph of
11	Mr. Roeder's e-mail, and in that paragraph, does not
12	Mr. Roeder suggest that it takes six years to build a coal
13	unit?
14	MR. PERKO: Objection, Your Honor. The document
15	speaks for itself.
16	CHAIRMAN BRAULIO: I'm going to let Mr. Bushee ask
17	the question and let Mr. Waters answer with as much
18	interpretation in context as he wishes.
19	Can you repeat your question, Mr. Bushee?
20	BY MR. BUSHEE (Continuing):
21	Q Mr. Waters, looking at the second paragraph of
22	Mr. Roeder's e-mail
23	A Yes.
24	Q would you read the first sentence?
25	A "If it takes six years to build a coal unit, that

makes 2009 the first year it can come into the plan." And the way to interpret that -- it's fairly straightforward at this point, and this is something we do. The other source of data that we use for technologies is the EPRI Technology Assessment Guide.

1

2

3

4

5

25

6 And without getting into confidentiality issues 7 there, I would say that the TAG data is generic. To some 8 extent, we can modify it to be regional. But it does not 9 typically take into account the lead time -- all of the lead time necessary to build any given technology. For instance, 10 11 if you were to look at that same source for combustion 12 turbines and combined cycles, you would also show very short 13 lead times, because typically they don't account the time 14 that we have to spend as Progress Energy up front in the siting and licensing part of the process. 15

So this lead time is little more than construction. There's a little bit of extra front-end time, but it's basically construction plus a little bit of time. The Burns & McDonnell study is more representative of the actual time. That's why we went and contracted for that data.

It is more Progress Energy specific. It is more site specific and certainly Florida specific. So we have the real -- I think the real lead times, a closer estimate of the cost.

I'd point out just as an example. The TAG would

not include time to do an RFP, you know, as one example. 1 And 2 that's something we would have to do in construction of the 3 coal unit. So there would be extra time on the front end. 4 So this is just using some generic data and coming 5 up with an answer; but, basically, it does not really say 6 that we could build a coal unit in six years. We couldn't. 7 Burns & McDonnell, that study said seven years, did 0 8 it not? It said seven years, and that's why I was looking 9 Α 10 for Chapter 7 because there's a caveat on that. And I know 11 we provided multiple copies of that document and, you know, 12 maybe we need to come back to that later. I guess we can distribute one of the other companies that had Chapter 7. 13 14 But Burns & McDonnell says clearly in Chapter 7 that is a 15 very aggressive schedule, and that's the way they 16 characterized it. And I would agree with that; it's very 17 aggressive. 18 0 If Mr. Roeder was correct in 2003 that a plant could be built in six years, then 2009 would be the earliest 19 20 that it could be built; is that correct? 21 If he was correct, yes, but he's not. Α 22 MR. BUSHEE: Could we go off the record for just a second, Mr. Chairman? 23 CHAIRMAN BRAULIO: Go off the record. 24 25 (DISCUSSION OFF THE RECORD).

C & N REPORTERS TALLAHASSEE, FLORIDA (850)697-8314

1 CHAIRMAN BRAULIO: We'll go back on the record. 2 BY MR. BUSHEE (Continuing): Would you turn to page -- well, you're on Page 6 --0 3 at Line 7 of your testimony where you state that you're 4 unaware of any merchant coal generation in Florida other than 5 the one facility that you were negotiating with. Do you see 6 7 that? 8 А Yes. Progress wouldn't be limited to looking for coal 9 0 capacity just in Florida, however, would it? 10 No, that's true. I'm not aware of any existing 11 А 12 coal capacity outside of Florida either, but I was addressing 13 Florida at this point. 14 0 Have you done a comprehensive review to determine whether there might be coal capacity outside of Florida that 15 could be available? 16 Only in consulting with our wholesale marketing 17 Α group and asking them, you know, what the market was and 18 what's available. Beyond that -- you know, that's their job 19 to stay in touch with the market, so I rely on their judgment 20 21 on that. But the answer is you haven't done a comprehensive 22 0 review of what might be available for coal capacity? 23 No, not personally. 24 А Are you aware of any coal plants that are currently 25 Q

1 in planning that could be available in the 2010 to 2015 time 2 frame?

A Well, in that time frame, yes, I think there are a number of plants that are in planning stages, including --I've seen plans announced within Florida for FPL in the 2012 time frame, but I mean that's a pretty broad range. There are, I believe, some plants in the planning stage.

Q What plants in the planning stage are you aware ofbesides the one that you just mentioned?

A Well, from memory, I don't remember all the in-service dates. A number of utilities, I think from municipals and cooperatives in Florida have announced plans for coal units roughly in that time frame. And I believe there have even been plants discussed in Georgia in that time frame, but I'm not sure of exact in-service dates.

16QAre you familiar with an organization called LS17Power?

A I'm heard of it, yes.

18

19 Q Are you familiar with their Longleaf project?

20 A Not real familiar, no. I know they've got requests
21 posted on Oasis for transmission service.

Q Looking at, again, Page 6, starting at Line 10, you state that Progress has not received any proposals for coal generation in response to its recent requests for proposals. Do you see that?

1	A Yes.
2	Q And by that I assume you're talking about the RFP
3	for the Hines 4 unit?
4	A And Hines 3.
5	Q Okay. Did those RFPs specifically ask for capacity
6	in the 2010 to 2015 time frame?
7	A No, they were targeted at the specific units that
8	were laid out in those proposals, those RFPs.
9	Q The time frame for power delivery under the RFP was
10	less than seven years after the RFP was published, was it
11	not?
12	A Correct. That's a result of the avoided unit or
13	the target unit being a combined cycle unit.
14	Q How much less than seven years was the time frame?
15	A The RFPs would be roughly three to four years ahead
16	of the need.
17	Q So accepting your assertion that a coal unit takes
18	eight years to permit and build, it would not be possible to
19	submit a new coal proposal in response to an RFP, would it?
20	A Certainly not starting from scratch, unless
21	somebody had already at this point, if you were to go,
22	again, back to the Burns & McDonnell study, if you were to
23	look at five years from now, you would have had to have
24	siting, some significant licensing done and, I think, even be
25	into equipment acquisition at this point to be able to get

1 the project in service on June 1st, 2010. 2 0 The RFPs that we just discussed were not undertaken 3 in connection with the expiration or replacement of the 4 existing UPS agreement, was it? 5 Α No. 6 And certainly Progress didn't conduct an RFP to see 0 7 whether there were alternatives to the two proposed 8 agreements in this proceeding, did it? 9 Α Correct. 10 0 Earlier you stated that you're director of resource planning for Progress Carolinas. Can I correctly infer that 11 12 you're familiar with the Progress Carolinas' resource planning practices? 13 Α Yes. 14 15 0 Are you familiar with Progress Carolinas' May 17th, 2005, RFP? 16 17 Α Yes, I am. 18 0 Are you involved with that RFP? 19 А Yes. 20 Q And what is your involvement with that RFP? The person -- the lead person responsible for that 21 Α 22 RFP reports to me. 23 Is it correct that that RFP seeks proposals for 282 Q 24 megawatts? 25 А Yes, that's the, I believe, summer rating -- or,

excuse me, winter rating for the unit that was posted, yes. 1 Is it your understanding that Progress is not 2 0 required to conduct an RFP for that 282 megawatts? 3 А Yes. 4 I'd like to refer back to Exhibit 19. Do you have 5 0 that in front of you? б 7 А Yes. And that e-mail indicates that Mr. Roeder has 8 0 performed an economic analysis of the UPS agreements with 9 Southern, does it not? 10 Α Yes. 11 Would you please read aloud the sentence right 12 0 under the file marker that begins, "As I mentioned." 13 "As I mentioned, " that sentence? 14 Α 15 Q Yes. 16 "As I mentioned during the conference call, I don't Α see the need to rush into doing this deal. It doesn't start 17 until 2010." 18 And would you continue? 19 0 "So there should be plenty of time to find 20 Α 21 alternatives, paren, an RFP would probably be the best way to 22 do this, close paren." 23 I'd like to talk about the ten-year site plan for a 0 24 moment. Am I correct that the purpose of a ten-year site 25 plan is to identify, generically, resources that might be

1 available? 2 А NO. I would say that the purpose of the site plan is to identify what our base plan is. It's to identify where 3 we plan on building. I would look at it as basically 4 providing a couple of functions. One is a checkpoint for the 5 Commission to check and see that we're planning properly to 6 meet future needs, and it also -- it serves as something of a 7 heads-up to local agencies to see where we're building and 8 9 what we're building nearby. Would you turn to Page 7 of your direct testimony 100 11 please? 12 (WITNESS COMPLIED). 13 А Okay. And at Line 1. 14 0 15 Yes. Α 16 And you state there that, for purposes of the Q analysis, we use the same industry standard models and 17 18 assumptions typically used for developing the ten-year site 19 plans? 20 Ά Yes. Which analysis are you referring to there? 21 0 22 I'm talking about the overall process where we А 23 basically use the Strategist model to develop the economics. In the more general sense, in the ten-year site plan, we'll 24 25 compare alternatives within Strategist and identify a base or

1 self-build plan for the purposes of the site plan. In this case it's a similar analysis. We use Strategist to identify 2 the base plan versus the Southern plan. 3 0 And the industry models that you're talking about 4 there don't identify specific resources that might be 5 available; is that correct? 6 7 No, those would be inputs. Α And the Progress analysis in this proceeding 8 0 compares the cost of the proposed UPS agreements against the 9 10 generic self-build alternatives; is that correct? Yes, that's correct. 11 А 12 0 Is it conceptually possible that Progress could enter into a UPS agreement for the years 2010 to 2013 and 13 14 then build a coal unit to come on line after that time? 15 I don't know. I think that's a question for the А 16 Southern wholesale marketers, as to whether or not they would 17 be willing to do something like that. The question I asked, of course, is whether it was 18 0 19 conceptually possible as to whether it could actually be 20 done. 21 Α Well, putting conception -- anything is 22 conceptually possible, but I'm not sure whether it's 23 practically possible. Did Progress ever do an analysis of bringing a coal 24 Q plant on line in 2013 and having the proposed agreements 25

terminate then?

2 We did not. We did an analysis of bringing the Α coal unit on in 2013, independent of the Southern analysis, 3 and that was the function or the focus of the 2004 base load 4 study that we performed where we looked at not only 5 pulverized coal but nuclear and coal gasification and so on. 6 The decision was made, following that study, not to bring in 7 a pulverized coal in 2013 because of the overall economic 8 9 picture. When we looked at that on a long-term basis, it was 10 more economic over the life cycle, but it took many years to break even versus a combined cycle. So that was done 11 independently of the Southern purchase, and I think the 12 results would be very similar. If we looked at it as a 13 replacement for the Southern purchase, I don't think you'd 14 15 get a different answer.

Q Did Progress consider whether power might be
available for -- rather from QFs?

A We always consider whether power is available from QFs, but QFs are a limited resource, and we tend to operate off the known rather than to speculate as to what might develop. In other words, we work off contracts we have or facilities that we know about rather than assuming they will develop new facilities.

24 Q But Progress didn't do a comprehensive analysis of 25 what QF power might be available?

I don't think I'd agree with that. I think if 1 А you're asking did we speculate there might be a new market in 2 OFs or that new facilities might develop, no, we did not do 3 But we do know what's out there, and we do know what that. 4 we have under contract. We know when the contracts end, and 5 we do an analysis of what would be available and when on that 6 7 basis. Did you contact the existing QF facilities that 8 0 might have power available to see if they would be interested 9 in selling in the 2010 to 2015 time frame? 10 11 Α No. Is it true that Progress didn't consider additional 12 0 demand-side management beyond what is listed in the ten-year 13 14 site plan? 15 In this analysis, that's correct; and that is А 16 because the goals for demand-side management are set with Commission approval on a five-year cycle. We do a very 17 comprehensive study of demand-side management, and then once 18 19 those goals are put into place and approved, we take that as more of an input to the process at that point. 20 0 Is it --21 But the -- I'm sorry. I wanted to just add that 22 Α 23 the purpose of the goal-setting is to identify the maximum cost effective level of DSM, and that's how the goals are 24 set. So that becomes part of our base plan. 25

C & N REPORTERS TALLAHASSEE, FLORIDA (850)697-8314

And if you identified an opportunity that was cost 1 0 effective, is it your testimony that you wouldn't take 2 advantage of that if it exceeded the goal in the ten-year 3 4 site plan? 5 Α No, we would absolutely look at it if an 6 opportunity became available or even, you know, we could 7 change existing programs. I think I mentioned earlier, I feel like my obligation is to do what's best for customers. 8 9 If there's an opportunity, I will pursue it. And I think that's the reason we're here. That's what we're trying to do 10 with the Southern contract. We will look at opportunities. 11 12 0 For example, has Progress considered whether 13 time-of-use rates might result in significant conservation? I can't address that from first-hand knowledge. 14 Α 15 That would be part of the overall DSM plant management, and so I don't have knowledge of that specific program one way or 16 the other. 17 18 0 Is it true that if you conserved a megawatt that you wouldn't have to contract for that megawatt? 19 20 А Generally speaking, that's true. Yes. 21 0 I'd like to talk about transmission issues a little 22 bit more. If you'd turn to Page 12 in your direct testimony. (WITNESS COMPLIED). 23 24 А Okay. 25 And specifically at Line 6. Q

1	A Yes.
2	Q You assert that the UPS agreements allow for the
3	preservation of Progress' transmission path to the north.
4	It's true, is it not, that the UPS agreements do not govern
5	access to that transmission path?
6	A That is true. They are linked, but in today's
7	world, they are separate agreements.
8	Q Would you turn to Page 14 of your direct testimony
9	and specifically Lines 22 to 23?
10	(WITNESS COMPLIED).
11	A Yes.
12	Q And there you discuss the Florida/Georgia
13	interface?
14	A Yes.
15	Q Isn't it true that Progress' rights to use the
16	Florida/Georgia interface are independent of these UPS
17	agreements?
18	A I will say yes. I think we have to be a little
19	careful here because the interface by itself is something
20	that does not necessarily provide any benefit. You have to
21	have a path to the interface. So while there's an allocation
22	at the border, you've got to get there first. So I would say
23	they are linked, although not directly or contractually
24	linked, but there's certainly a physical basis for linkage.
25	Q And, in fact, the rights at the Florida/Georgia

ł

1	interface are established with a separate agreement, are they
2	not?
3	A Yes.
4	Q And if Progress entered into a different agreement
5	with Southern, it could still use its rights at the
6	interface, could it not?
7	A I believe that's correct, yes.
8	Q Or for that matter, if it entered into a different
9	agreement with anybody that could deliver power across the
10	Southern system, it could still use those rates, could it
11	not?
12	A Yes, I think, provided there's a path to the border
13	and that transmission service can be arranged, they can use
14	the interface, yes.
15	(WHEREUPON, THE TRANSCRIPT CONTINUES IN SEQUENCE IN
16	VOLUME 3).
17	
18	
19	* * * *
20	
21	
22	
23	
24	
25	

1	CERTIFICATE
2	
3	STATE OF FLORIDA)
4	COUNTY OF LEON)
5	I, NANCY S. METZKE, Certified Shorthand Reporter
6	and Registered Professional Reporter, certify that I was authorized to and did stenographically report the foregoing
7	proceedings and that the transcript is a true and complete record of my stenographic notes.
8	DATED this 2nd day of June, 2005.
9	billb chib and day of bane, about.
10	NANCY S. METZKE, CCR, RPR
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	