## BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

DOCKET NO. 041393-EI

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.



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# VOLUME 4 Pages 244 through 277

PROCEEDINGS:

HEARING

BEFORE:

CHAIRMAN BRAULIO L. BAEZ

COMMISSIONER J. TERRY DEASON

COMMISSIONER RUDOLPH "RUDY" BRADLEY

DATE:

Thursday, June 2, 2005

TIME:

Commenced at 9:30 a.m. Concluded at 3:40 p.m.

PLACE:

Betty Easley Conference Center

Room 148

4075 Esplanade Way Tallahassee, Florida

REPORTED BY:

MARY ALLEN NEEL, RPR

DOCUMENT NUMBER-DATE

1 Thereupon, 2 SAMUEL S. WATERS 3 continues his sworn rebuttal testimony from Volume 3 as follows: 4 CROSS-EXAMINATION 5 BY MR. BUSHEE: 6 7 Q Mr. Waters, a number of the issues that you've raised we've already discussed earlier in 8 9 cross-examination, and you're not changing any of the answers that you gave me earlier today, are you? 10 11 Α No. Where in Mr. Brubaker's testimony does he 12 1.3 suggest that Progress wait until 2010? 14 That concerns the discussion of rollover rights and the fact that they don't expire until 60 days 15 before, so it's implied that we could wait until that 16 point to take action, at least on that part of the 17 transaction. 18 Please point to me in his testimony where he 19 20 says that Progress should wait until 2010. Α I don't believe his testimony says that we 21 should wait until 2010. It's simply implied from the 22 discussion of rollover rights. 23 Please point to me in his testimony where he 24

implies that Progress should wait until 2010.

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Okay. I'll need to get a copy of his Α testimony. I left that behind. I refer specifically to page 22, line 24, 3 beginning with the answer to -- the question on line 23 is, "What does that mean for PEF's rollover rights?" 5 The answer is, "PEF's rollover rights under Southern's 6 OATTs for transmission service under the existing UPS 7 agreement do not expire until 60 days before the current 8 UPS agreement expires, so PEF has until April 2, 2010 to 9 exercise its rollover rights. Accordingly, I do not 10 believe there is any merit to PEF's claim that" -- and 11 they go on and on about they can act on the request at 12 any time. 13

> I'm inferring from that that there's a suggestion we could delay, and there's no rush to take any action.

- Mr. Brubaker doesn't say that in his testimony, 0 though, does he, that Progress should wait until 2010?
  - Α No.

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- In fact, that testimony simply states that Progress has until April 2, 2010, to exercise its rollover rights; correct?
  - Α That's correct.
  - It says nothing more and nothing less; correct? 0
  - Well, I think in the larger context, he's Α

addressing what the significance of the rollover rights are at this point. And I think if you were to read the page before and continuing that there is an inference that there's no rush to do anything on the rollover rights, that we have until 2010 to exercise those.

- Q When is the system impact study due?
- A I believe it's due on or around June 15th, somewhere in that vicinity.
- Q And your position is that the Commission shouldn't wait a couple of weeks to find out whether there's transmission and how much it would cost, but rather, they should make their decision before that?
- A Well, what I'm saying is there's no reason to wait. Let's pursue the implications of waiting.

If on the response from Southern it says there are no impacts to the system, it is expected at that point that we would enter into agreements to take transmission, and we have to make a decision within 15 days to either proceed or not proceed. If we were to delay, I'm not sure what's suggested in that. We could certainly not schedule another hearing at that point and, you know, retry the issues within that 15-day window.

And the reason I say there's no reason to wait, if the system impact study comes back and there are

system impacts that need to be addressed, the contracts very carefully lay out what happens in that instance.

So there's no harm to PEF's customers, and there could be harm if we are forced into a situation of having to decide on transmission without knowing that we're going to reach judgment in this case.

Q And how is the Commission and Progress's customers able to fully evaluate the merits of these proposed agreements without knowing if transmission exists or how much it might cost?

A Well, again, Mr. Bushee, the contracts clearly lay out what happens in that instance, and there are -there's not a situation here where we're going to
increase the costs of the deal and assume that those
increasing costs are approved. If there are increased
costs, the contract steps would be pursued. A judgment
will be made at the end of that, and it may or may not
prevent continuance of the deal.

Q And Progress is not at any risk for bearing any additional costs, is it?

A No, I think we are if we end up with transmission and no agreement. If what you're suggesting is the Commission delay, we are forced into a decision with taking transmission or not. If we take the transmission on the assumption that this may be

approved at some future date and it's not, I think there
is a risk there.

Q And if the Commission approves your proposed agreements without knowing whether there's additional transmission costs, Progress has no risk. They recover those costs from the customers; correct?

A No, I don't think that's the case. I think I mentioned before that in approving the concept of the contracts and the terms and conditions within those contracts, the Commission is basically approving the overall deal. But actual cost recovery would be approved at the time it's submitted, and it would be subject to a review against the terms and conditions in the contract. So if we were to increase costs beyond what we've presented and not been prudent in exercising the terms within the contract, I think the Commission would have the right to deny cost recovery in that case.

Q So it's your position that if Progress incurs system improvement costs that those costs, whatever they may be, would be subject to challenge when Progress seeks cost recovery?

A Only to the extent they might affect the overall costs. Again, the language of the contract is clear. And I don't want to get into proprietary provisions, but there is a provision that says what

happens in the case there are system impact costs and how those are handled. So just the fact that there may be system impact costs is not enough to trigger a challenge. It would be the net overall effect on the cost of the contracts that I think would be subject to challenge, if any.

Q And until we see what those costs are, we don't know how the contract provisions will apply; correct?

A That's true, we don't, but what I'm saying is it's not all that relevant, because there are -- the situation where costs go up to customers is protected against in the contract.

Q Would you turn to page 3 of your rebuttal testimony?

A Okay.

Q And on page 3, starting at about line 20, you talk about a 5 to \$11 million cost, net cost. Do you see that?

A Yes.

Q If in fact Progress had to pay start costs, that number would increase, would it not?

A Only if that were the only change I made to the analysis. And I don't -- as I mentioned in my direct testimony, it's not -- at that point, we would be comparing apples and oranges. I have to do the same

analysis on my own self-build units, and my belief is 1 2 that that will be a net zero change to the overall 3 analysis. We'll still end up at 5 to 11 million. 4 So you haven't done the analysis, but you've already assumed the conclusion? 5 Α In this case, yes. 6 Would you turn to -- do you have a copy of the 7 0 8 Franklin agreement with you? The Franklin agreement? 9 Α Yes. 10 0 11 Ά Yes. Would you turn to page 30, and specifically 12 13 Section 7.4.4? Okay. I'm at Section 7.4.4. For some reason, 14 Α 15 that's on page 36 of the agreement I have. But be that as it may, I think it's the same section. 16 I believe you've got the correct provision. 17 0 18 Let me be sure. I am again confronted with the problem that 19 20 this document is confidential, and I would like to ask you a question about the first sentence, so I'll ask you 21 22 whether -- and if you need the advice of your counsel, whether the first sentence by itself is confidential. 23 24 Part of the first sentence is, yes, and that is -- what happens after two business days is the 25

1 confidential part. Would you agree with me that what happens after 2 0 two business days leaves some discretion in the seller 3 to determine what it will do? 4 Α Yes. 5 The seller, of course, being Southern Power? 6 0 7 Yes. 8 Q And thus, we don't know what would happen here until the seller makes up its mind; correct? 9 Α I'll say yes. Let me be very specific, the way 10 you've put the question. The seller has two days to 11 tell us what they're going to do, and we have rights 12 13 after that point, once they've told us, as to how we will react to the decision they make. So, yes, we don't 14 15 know exactly what they'll do or what might happen, but we do know that whichever way they go under this 16 17 provision, we have rights to exercise at that point. 18 other words, we are not stuck because they decide to do nothing in response to this provision. 19 I think because of the confidential nature of 20 this, I really can't ask further questions, and they're 21 best addressed on brief. 22 CHAIRMAN BAEZ: Mr. Bushee, are you moving on 23

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from this topic?

MR. BUSHEE: Yes, Mr. Chairman, I believe I

1 | will.

CHAIRMAN BAEZ: Can I just ask Mr. Waters a question, because I'm trying to understand. You spoke a couple of minutes ago, a couple of questions ago about system impact.

THE WITNESS: Yes.

CHAIRMAN BAEZ: And certain system impact costs that were -- and I don't want to put words in your mouth, but were somehow accounted for in the agreement. Is there an implication there that there is some known cost that's worked into the magic number?

THE WITNESS: I'll try and do this without violating the confidential --

CHAIRMAN BAEZ: I know. It's --

THE WITNESS: I'll try and walk my way through this. We know the tariff rate.

CHAIRMAN BAEZ: Uh-huh.

THE WITNESS: The tariff rate is a benchmark in this contract for costs for transmission. If it comes back that there are system impacts and we have additional costs above the tariff rate, in addition to or above the tariff rate, that triggers the provisions of the contract. We now have a cost higher than the tariff rate.

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At that point, the seller has options laid out

here in 7.4.4 how they react. They tell us what they want to do within two business days and how they would react to that situation, then we proceed from there.

Based on what they tell us, we would make a judgment, do we still want to proceed with the deal or not, and so on and so forth. There are a number of provisions as to how much transmission can be provided at the tariff rate versus how much might be at a higher cost, how much total can be provided. There are a number of triggers here that we would have to walk through.

CHAIRMAN BAEZ: Okay. The part of the discussion I think that I'm more interested in is that point in the future where those costs are presented for recovery.

THE WITNESS: Yes.

CHAIRMAN BAEZ: And if you -- and I think the answer to my question was a yes, that there's some -- there's something, an upper limit, that being the tariff rate --

THE WITNESS: Yes.

CHAIRMAN BAEZ: -- beyond which you are -beyond which you have a situation where you have excess
system impact costs and you have to make a decision to
present those for recovery or not.

THE WITNESS: Yes.

1 CHAIRMAN BAEZ: Is that fair? THE WITNESS: Yes. The first decision is 2 3 whether we even go forward with the deal, and ultimately that leads to --4 5 CHAIRMAN BAEZ: But assuming --THE WITNESS: -- cost recovery, yes. 6 7 CHAIRMAN BAEZ: Right. But assuming -- well, would you ever knowing -- is it your understanding those 8 9 excess costs would be at risk if you presented them for 10 recovery? 11 THE WITNESS: That's my understanding. 12 decide to not exercise our rights under the contract to, 13 let's say, hold the costs equal and we have additional 14 costs, I think that would be certainly subject to 15 review, and I think we would have to justify that, as to 16 why we went forward with that. And I'm assuming that we 17 wouldn't do that unless we had a good justification in 18 the overall economics of the deal for doing it. 19 CHAIRMAN BAEZ: Is there any -- is there any 20 scenario in which, given excess costs, the company would 21 choose not to present for recovery? THE WITNESS: I have difficulty answering that. 22 I don't --23 24 CHAIRMAN BAEZ: It's not a loaded question, 25 Mr. Waters. I guess there's -- I mean, we've heard some

talk -- and I don't want to start mixing concepts, certainly, but there's some talk of -- there has been some discussion over sharing on energy sales or economy sales. I mean, would that ever be part of a dynamic in which you say, "You know what? On our side it's a wash, and we can absorb that exposure"? And I don't know the answer to that, I guess.

THE WITNESS: I guess the best I can say, Mr. Chairman, is maybe.

CHAIRMAN BAEZ: Okay.

THE WITNESS: You know, there may be scenarios where that happens. My template for this is that this would flow through the clause as it is finally approved. Any deviation from that would be subject to review, and I don't know what would happen at that point.

CHAIRMAN BAEZ: Fair enough. I'm sorry to interrupt, Mr. Bushee.

#### BY MR. BUSHEE:

Q Mr. Waters, just to sum up the conversation that we've been having, the system impacts, what the seller will do and what Progress will do in response will be known this month, will it not?

A I think that's correct, if they meet their timetable. And, of course, the 60 days is a guideline. It doesn't mean we'll get the answer back, but

1 potentially. 2 Would you turn to page 10 of your rebuttal testimonv? 3 4 Α Okav. 5 And at line 3, you talk about Southern as a marketer has an interest in selling. Does not Progress 6 7 as a buyer have an interest in obtaining the best deal? Α Yes. 8 And does not Progress's customers have an 9 10 interest in Progress obtaining the best deal for them? 11 Yes, I would agree with that, provided that 12 we're defining the best deal as the best overall 13 package, not just pricing. 14 Would you please turn to page 12 of your rebuttal testimony? And I'm looking at line 14. 15 Α Yes. 16 17 And you state that Mr. Brubaker suggests that 18 Progress should have added coal capacity in advance of 19 the expiration. 20 Yes. 21 Would you pull out Mr. Brubaker's testimony and 0 22 look at the lines that you've cited? Α 23 Yes. Mr. Brubaker there did not say that Progress 24 25 should have added coal capacity, did he?

1	A No. He says we should have given serious				
2	consideration to replacement of the UPS contracts or the				
3	UPS agreements.				
4	Q And would you look at line 16 of your				
5	testimony?				
6	A Yes.				
7	Q And you say that Mr. Brubaker said that				
8	Progress should have planned to add coal capacity in				
9	2013.				
10	A Yes.				
11	Q Mr. Brubaker didn't say that Progress should				
12	have planned to add coal capacity in 2013, did he?				
13	A No. The exact language is that we should				
14	actively consider installation of a solid fuel facility.				
15	Q Mr. Waters, are you aware of whether any				
16	existing wholesale sales from Progress involving coal or				
17	nuclear capacity are due to expire?				
18	A Any existing wholesale sales? Due to expire in				
19	any particular time frame? Most of the agreements have				
20	expiration dates.				
21	Q In the 2010 to 2015 time frame.				
22	A Yes. Right now, unless renewed, there are				
23	wholesale contracts that would expire in that time				
24	frame.				
25	Q Did Progress consider whether power from those				

sources would be available as an alternative to the 1 2 proposed agreements? Okay. I may be addressing something different. Α 3 Maybe I need to back up. I'm talking about selling to wholesale customers, meeting load requirements of 5 wholesale customers. Are you talking about contracts, 6 purchased power contracts set to expire in that time 7 frame? Q I'm asking whether Progress would have capacity 9 that is being used for wholesale currently that could be 10 available for retail. 11 Okay. Yes, we have evaluated that, and that's 12 looked at every year as to what the potential impact of 13 that would be. 14 MR. BUSHEE: I have no further questions. 15 CHAIRMAN BAEZ: Staff? 16 17 MS. VINING: Staff has no questions. CHAIRMAN BAEZ: Commissioners, questions? 18 COMMISSIONER DEASON: I have a question. 19 Mr. Waters, do you have a copy of Mr. Brubaker's 20 21 testimony? Yes, I do. 22 THE WITNESS: COMMISSIONER DEASON: Okay. On page 3 of his 23 testimony, there as part of his list of items -- and I 24 would direct your attention to item 3 and item 8 on that 25

list. Do you see that?

THE WITNESS: Yes.

COMMISSIONER DEASON: Item 3, I think there was some discussion earlier with counsel concerning that particular item, but just to paraphrase it, it states that PEF should have given serious consideration to constructing or purchasing solid fuel capacity in advance of the expiration of the agreements. And then item 8 indicates that the existing agreements do not expire until 2010, fully five years from now, so there's no rush to enter into new agreements.

I'm having some difficulty understanding. One seems to be that something should have been done a long time ago, and then the other one is saying we can just wait because there's no rush.

And then I also would direct your attention to item 11 on that list, which is the recommendation to not approve these agreements and that we enter into -- I guess more fully analyze alternatives.

First of all, let me ask you this question. In regard to item 11, given what has happened now and that there has not been a decision to construct a solid fuel facility, and given the lead times associated with that, what are the alternatives that could be analyzed in his recommendation in item 11?

THE WITNESS: I have assumed, Commissioner,
that probably refers to conducting an RFP or something
along those lines. And let's say we issue an RFP for
the June 1st, 2010 date, and we take the next six months
to analyze the bids. About the only bids we could get
are combined cycle bids. That's consistent with the

RFPs.

Or, as I mentioned earlier, based on the Burns and McDonald study, it would have to be a coal unit that either exists or is very far along in siting, licensing, acquiring the equipment, and so on. And I don't think -- other than what Southern is offering us, I don't think there's any coal capacity out there to be offered, and I don't think any of the facilities -- although some have been discussed, I don't think any are that far along in the process where they could respond to the 2010 RFP, if that's what's intended.

timing we talked about a little earlier in our previous

So I think what we would see is, we would get another round of combined cycle bids, similar to what we've seen in the last two solicitations.

COMMISSIONER DEASON: Would those -- in your opinion, would those bids be materially different from what you've already evaluated in your base case scenario?

I mentioned in my rebuttal

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testimony I went and compared the Franklin price, just as an example, to the prices we saw in the last RFP, and it's basically the same as what we've seen. In fact, the UPS prices are a little better on the fixed side. But I would not expect to see -- if anything, what I understand of the market now, prices are going up. everybody has heard about the steel and concrete prices going up because of demand in India and China and so on, and we can probably talk about that all day long. But I don't expect to see anything less than what I've seen. It would probably be higher prices for combined cycle. And so I'm not going to get anything that's any more competitive. I also, I don't believe, will get any coal in that solicitation.

No.

THE WITNESS:

COMMISSIONER DEASON: Well, let me ask you If you were to enter into an RFP, you do not believe that Southern would respond to that RFP with a part of their share of capacity, or do you think this is a one-time opportunity, it's kind of take it now or leave it?

I think it's take it now or leave THE WITNESS: I think the only way it would show up in an RFP is if they couldn't sell it somewhere else. And given the interest in coal and fuel diversity, I think that's

pretty unlikely. They would find a buyer. Seventy-four megawatts, it doesn't even take a large buyer at that point to just deal with the 74 megawatts, so I think it's highly likely it would just disappear.

CHAIRMAN BAEZ: Redirect?

#### REDIRECT, EXAMINATION

#### BY MR. PERKO:

Q Mr. Waters, Mr. Bushee asked you if you would assume that there would be zero change to the overall cost analysis if start costs were added back into the base case in the UPS analysis. You agreed that you had. Why were you willing to make that assumption?

A I assumed that if that were the only change, it might change the analysis. But I think I added that I would not think it appropriate that that was the only change. If we're going to change the Southern UPS costs, we should look at comparable changes on the self-build side, and my feeling is that would be a wash in the analysis.

Q Why do you feel it would be a wash in the analysis?

A We discussed this a little during my direct testimony, but basically we're looking at a combined cycle of the same technology and the same design as what we have in the self-build plan. I would expect the

start-up cost profile and the direct costs associated 1 with that to be very similar, and I would expect the 2 3 number of starts to be very similar. So if I'm looking at the same rate and the same number of starts roughly 4 on both sides, that should wash out. I don't expect it 5 to influence the bottom line. 6 7 MR. PERKO: No further questions. CHAIRMAN BAEZ: Exhibits? Mr. Perko, I'm 8 showing 15 and 16. 9 MR. PERKO: That's correct, Mr. Chairman. 10 CHAIRMAN BAEZ: Without objection, show 11 Exhibits 15 and 16 admitted into the record. 12 (Exhibits 15 and 15 were admitted into 13 evidence.) 14 CHAIRMAN BAEZ: And that completes our 15 16 testimony. Ms. Vining, I quess at this point we can go 17 over some future dates. 18 COMMISSIONER DEASON: Mr. Chairman, before we 19 do that --20 CHAIRMAN BAEZ: Go ahead, Commissioner. 21 COMMISSIONER DEASON: And this is something I 22 23 quess I need to raise with you and the staff, and perhaps the parties as well. 24 We've had a great deal of discussion today 25

concerning the system impact study, when it's due, what it's going to say, potential ramifications consistent with language in the contract, and options, and that sort of thing. And while Mr. Waters indicated that the 60 days is a general guideline, he did acknowledge that it's likely, or consistent with that guideline, we're going to have the results of that impact study within the month of June.

And so when we start talking about schedules and when this thing goes a vote and that sort of thing, I guess the question is a procedural one. If that becomes a known fact at some point, is it something that we can consider, or do we have to make some type of allowances for that to be added to the record at some point, and is that consistent with the procedure in protecting due process?

It just seems to me that it would be good information to have if it's going to be ascertained within the next few weeks before this actually goes to a vote.

CHAIRMAN BAEZ: I would agree with you, and I guess maybe that's a question that we need to pose to all the parties. Is there a -- hey, I don't have an answer for you myself, but I'm sure there's enough smart people in the room to see -- if it's not available. to

1 make that happen.

Ms. Vining, question: Is there a way to create a placeholder, for lack of a better term, for the system impact study? And I guess I'll hear from the parties as well.

MS. VINING: Well, it is possible that you could make it a late-filed exhibit. However, I would think that there would be cross-exam on the results of that study, but the parties can say whether or not they would require cross-exam on that.

CHAIRMAN BAEZ: I think you just flagged one argument. Mr. Bushee?

MR. BUSHEE: Mr. Chairman, I would urge that we do a couple of things. One, that we require the system impact study, the Southern response, which is due two days later, and Progress's response, which is due shortly thereafter, to be made as a late-filed exhibit. I would further urge the Commission to delay the briefing schedule until after we have that information.

At this point, it seems that there's no point in the Commission making a decision until it knows whether --

CHAIRMAN BAEZ: Go ahead, Mr. Bushee. Finish your sentence. I didn't mean to interrupt you, but I do want to remind you that that sounds like reconsideration

of reconsideration, but I get your point. And I think if you've been listening to Commissioner Deason, we may not need to repeat arguments that we heard earlier this moment.

MR. BUSHEE: And I'm not urging reconsideration. I'm simply saying that now that we have --

CHAIRMAN BAEZ: I didn't say you were. I said it sounded like it.

MR. BUSHEE: The simple point is, I think we need that information to make a decision, and I think for the parties to properly brief it, particularly given the complexities of the provisions in the contract. We can't get to that in the hearing today. So I would ask that we make it a late-filed exhibit and delay the briefing schedule.

CHAIRMAN BAEZ: And the suggestion keeps mounting. Mr. Perko?

MR. PERKO: Mr. Chairman, I'm afraid you stole a little bit of my thunder, but we think the schedule that we currently have is perfectly adequate. I think the testimony here demonstrates that to the extent that the system impact study has any impact on costs, that can be addressed in a prudency challenge when the costs are presented for recovery. I think you have the

evidence before you today to make the decision on whether the contract itself is a prudent and reasonable means of making the 20% reserve margin. Any arguments about the relevance or anything else can be made in the briefs, but --

CHAIRMAN BAEZ: Well, first, let me go back, because I don't think that you're necessarily answering the question that at least Commissioner Deason has put out there, or maybe you are. Is it your view that it would be improper to make room for the system impact study as part of the Commission's decision, you know, according to this -- for argument's sake, according to the timetable that we have established now?

MR. PERKO: Your Honor, my only concern is that we get back into another hearing, and it only delays things. I think -- it's not part of the record. We have no witnesses to cross-examine on it. I think the schedule that we have now provides the time to make a decision within the time period that the system impact study is likely to come out. So we would urge the Commission just stay with the schedule we currently have.

COMMISSIONER DEASON: Mr. Chairman, I would just -- you know, I had just asked the question, hoping that there was going to be a simple answer.

CHAIRMAN BAEZ: Well, and you should know better than me that there is no such thing. But I will say this. Commissioner Deason, I think your question, although it probably starts sounding impossible given all the circumstances, is still a good one. And I also want to say here that that was in some way the root of my questions to Mr. Waters in terms of what the upper limits were in terms of excess costs and so on.

And the reason behind it, for the record, is that what, certainly in mind, I've always tried to avoid is creating what I think Mr. Bushee's points have been leading to, at least on that subject, is that we create a blank check with very little review on the back end. And I can tell you that at the point where that gets presented to recovery, I'm going to have a real problem looking at costs in excess of whatever the benchmark -- whatever the costs that have been somehow provided for in some way in the contract are, which is why I asked Mr. Waters how he felt about having that money at risk.

And if there are other dynamics as part of the client's consideration, your client's consideration that become part of a decision of presenting what amounts to excess contract costs for recovery, if you can tell what I'm -- where I'm coming from, then I don't know if what Commissioner Deason has heard gives him some kind of

comfort that at some future date we may have this discussion again based on the impact study.

Something, and then we'll hear the response. I think it has been stated here at the hearing, and I think it's probably generally agreed that the burden rests with Progress as far as these particular contracts and trying to present them to the Commission for an up-front approval. If they're willing to -- if they think they can meet that burden without having this part of the record, so be it. If they are comfortable that the contract language itself provides enough assurances -- and I don't know. I don't know what that judgment is, and the record will reflect that, and our staff will analyze that at well. That's their choice.

I also agree with you, Mr. Chairman, that this Commission cannot be held to approve something that's not in the record. So if the contracts are approved at some future time and then there arises sometime in the future a question of additional transmission costs that somehow appear, this Commission is in no way bound to allow those additional transmission costs, it seems to me.

So I'm just -- one of the former Commissioners here always had a saying, "Let's just get the hay down

1 where the goats can eat it. " That's what I'm trying to 2 do here. 3 CHAIRMAN BAEZ: Clearly, there's a burden going 4 forward. And I'm not sure. I quess it falls to me. 5 think in the interest of keeping things moving as was 6 once thought proper --7 MR. BUSHEE: Mr. Chairman, might I respond to 8 the comments --9 CHAIRMAN BAEZ: Mr. Bushee, one last time, 10 yes. 11 MR. BUSHEE: I appreciate that. I apologize 12 for interrupting. 13 I guess two points come to mind. While I fully 14 agree that the burden is on Progress to demonstrate that 15 the agreements are reasonable and prudent, it becomes 16 difficult for White Springs to demonstrate that they haven't met their burden if we don't have the 17 18 information available. And the second part is that that 1.9 tells White Springs that they will have to be back here 20 in several years to examine these costs again, where if 21 we had waited a couple of weeks to see what the costs 2.2 were, we could have resolved the issues now. 23 CHAIRMAN BAEZ: And I want to be clear on 24 what your comment is. When you don't have -- when you

speak about not having the information to evaluate it,

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what information exactly are you talking about? The impact --

MR. BUSHEE: The system impact study and -- CHAIRMAN BAEZ: The system impact study.

MR. BUSHEE: -- the response that Southern has to the system impact study. There has been discussion about options, what would happen under the contract, and we simply can't know what that's going to be, or for that matter, whether there is transmission, until we see the results of that study in a couple of weeks.

CHAIRMAN BAEZ: And I may have lost my -- all right. Here's my decision. We don't -- I think we've got enough of a record as the case has been presented in order to decide whether the contract, entering into the contract is prudent or not. I think that White Springs has at least enough information at this point to deal with that issue alone.

As to the necessity or the probability of having to appear again years down the road when the system impacts are known, and if, and if the company decides to present those excess system impacts for recovery, I can't speak to. That is simply something that we are all going to have to consider our options when the time arises. I think you've heard at least some comments which may find themselves somewhere into a

decision, if it's appropriate at the time, as to what future considerations are going to look like.

But having said that, my decision is, we don't need to enter it. Commissioner Deason, I applaud your attempt, but in the interest of convenience and time, I don't think we're going to be able to do that now, although I would fully expect that to be part of some future record should it come to that. We don't need to take those as late-filed exhibits. So at least Mr. Bushee's suggestion -- he didn't make a specific request, but his suggestion is abandoned at this point.

We can get back to talking about future --

MS. VINING: I was just going to say,
Mr. Chairman, I just want to be clear. Progress is not
interested in having that as a late-filed exhibit and
then potentially moving back one agenda, with the
possibility that the system impact would come in around
the time of the 21st agenda, and then potentially we
would move consideration of this to the 5th, July 5th?

MR. PERKO: That's correct.

MS. VINING: Okay.

CHAIRMAN BAEZ: We'll keep the dates as they are, Ms. Vining, with all the comments hopefully taken to heart.

Before we got into this, I was fumbling around

1	for the future dates, so if you could just fill us in.			
2	MS. VINING: Sure.			
3	CHAIRMAN BAEZ: Because I don't have them in			
4	front of me.			
5	MS. VINING: You've already set a due date for			
6	the one late-filed exhibit.			
7	CHAIRMAN BAEZ: And that will be Monday?			
8	MS. VINING: Right.			
9	CHAIRMAN BAEZ: The 6th, is it, or the 5th?			
10	MS. VINING: That's correct, the 6th. And			
11	that would be for Exhibit 18.			
12	And then the hearing transcript, we're having			
13	daily transcription done, so the transcript should be i			
14	tomorrow.			
15	CHAIRMAN BAEZ: And the briefs are due on			
16	MS. VINING: The briefs are due on June 8th.			
17	CHAIRMAN BAEZ: June 8th.			
18	MS. VINING: And then the staff recommendation			
19	is to be filed June 16th.			
20	CHAIRMAN BAEZ: And that's a late-filed			
21	recommendation?			
22	MS. VINING: Yes, late-filed.			
23	CHAIRMAN BAEZ: Okay.			
24	MS. VINING: And then the agenda, the			
25	post-hearing agenda is June 21st.			

CHAIRMAN BAEZ: Very well. If there's nothing else from the parties at this point -- Mr. Waters, I failed to excuse you, although I'll bet you would have stayed there somehow. The witness is excused.

I want to thank you all for the questions and the input and the discussion, and more than anything else, for finishing ahead of schedule. They said it couldn't be done. Have a good afternoon, everyone.

(Proceedings concluded at 3:40 p.m.)

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### CERTIFICATE OF REPORTER

STATE OF FLORIDA) COUNTY OF LEON )

I, MARY ALLEN NEEL, do hereby certify that the foregoing proceedings were taken before me at the time and place therein designated; that my shorthand notes were thereafter transcribed under my supervision; and that the foregoing pages numbered 244 through 276 are a true and correct transcription of my stenographic notes

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, or relative or employee of such attorney or counsel, or financially interested in the action.

DATED THIS 3rd day of June, 2005.

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MARY ALLEN NEEL,

2894-A Remington Green Lane

Tallahassee, Florida 32308 (850) 878-2221

BOCKET
NO. 04/393-EIEXHIBIT NO
COMPANYI F PSC STOPE Compashon whe
WITHESS EXHIBIT NO
DATE DIO 105

	Comp	rehensive Exl	nibit List
Hearing I.D. #	Witness	I.D. # As Filed	Exhibit Description
Staff			
1		Comprehensive Exhibit List	Comprehensive Exhibit List
2		Composite Stip- 2	PEF's responses to Staff's First Set of Interrogatories (Nos. 1, 2, 4, 5, 7, 8, 10-15)  PEF's responses to Staff's Second Set of Interrogatories (Nos. 16-21)  PEF's response to Staff's Third Set of Interrogatories (No. 23)  PEF's 2004 Ten-Year Site Plan, p. 2-17 through 2-20 and 3-5 through 3-7; PEF's 2005 Ten-Year Site Plan, p. 2-17 through 2-20, 3-1 through 3-4, and 3-6 through 3-8
3		Composite Confidential Stip-3	PEF's responses to Staff's First Set of Interrogatories (Nos. 3, 6, and 9)
Testimony Ext	nibit List		PEF's response to Staff's Third Set of Interrogatories (No. 22) PEF's responses to Staff's First Request for Production of Documents (No. 1)
DEE Diversel/ Scott	-lawantal Dinast		
4	Samuel S. Waters		Confidential Version of the Direct Testimony of Samuel S. Waters
5	Samuel S. Waters	SSW-1	(Confidential) Contract for the Purchase of Capacity and Energy between Southern Company Services, Inc., and Florida Power Corporation d/b/a Progress Energy Florida, Inc. from Plant Scherer Unit No. 3
6	Samuel S. Waters	SSW-2	(Confidential) Contract for the Purchase of Capacity and Energy between Southern Company Services, Inc., and Florida Power Corporation d/b/a Progress Energy Florida, Inc. from Plant Franklin Unit No. 1

mg and a second of the second	Compi	rehensive Exh	nibit List
Hearing I.D. #	Witness	I.D. # As Filed	Exhibit Description
7	Samuel S. Waters		(Confidential) Summary of Costs and
		SSW-3	Benefits of Units Power Sales
			Agreement with Southern Company.
8	Samuel S. Waters		Savings of UPS contracts with
		SSW-4R	Economy Purchase Savings (revised
			May 10, 2005)
White Springs			
9	Maurice E.		Confidential Version of the Direct
	Brubaker		Testimony of Maurice E. Brubaker
10	Maurice E.		Estimate of Differential Revenue
	Brubaker	MEB-1	Requirements (Data)
11	Maurice E.		Estimate of Differential Revenue
	Brubaker	MEB-2	Requirements (Graph)
12	Maurice E.	1411.10-2	Actual and Projected PEF Gas/Oil
12	Brubaker	MEB-3	Reliance
12	1	MEB-3	
13	Maurice E.		(Confidential) POD-13
	Brubaker	MEB-4	
14	Maurice E.		Excerpts from Southern Company
	Brubaker	MEB-5	OATT
PEF Rebuttal			
15	Samuel S. Waters		Comparison of Base and Southern
	\$	SSW-5	UPS Resource Plans
16	Samuel S. Waters		(Confidential) Total Generation Fixed
		SSW-6	Cost Comparison
		55 11 0	

Comprehensive Exhibit List  Hearing I.D. # Witness I.D. # As Filed Exhibit Description									
Hearing I.D. #	Witness	I.D. # As Filed	Exhibit Description						
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Comprehensive Exhibit List  Hearing I.D. # Witness I.D. # As Filed Exhibit Description									
Hearing I.D. #	Witness	I.D. # As Filed	Exhibit Description						
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Comprehensive Exhibit List									
Hearing I.D. #	Witness	I.D. # As Filed	Exhibit Description						
			•						

**EXHIBIT NUMBER:** 

2

TITLE:

**COMPOSITE STIP - 2** 

**DOCKET NO:** 

041393-EI

**COMPANY**:

Progress Energy Florida, Inc.

WITNESSES:

Samuel S. Waters

**DESCRIPTION**:

**COMPOSITE EXHIBIT:** 

1) Non-confidential portions of Progress' responses to Staff's First Set of Interrogatories;

2) Progress' responses to Staff's Second Set of Interrogatories;

3) Non-confidential portions of Progress' responses to Staff's Third Set of Interrogatories;

4) Portions of Progress' 2004 Ten-Year Site Plan;

5) Portions of Progress' 2005 Ten-Year Site Plan.

PROFFERED BY: STAFF

PLORIDA PUBLIC SERVICE COMMISSION

DOCKET

NO. 04/393-E1 EXHIBIT NO 2

COMPANY/ FPSC Staffxtip-2

WITNESS. Composite Stip-2

DATE 08/02/05

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: 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.

DOCKET NO. 041393-EI

**SERVED: MAY 10, 2005** 

# PROGRESS ENERGY FLORIDA'S RESPONSE TO STAFF'S FIRST SET OF INTERROGATORIES (NOS. 1 – 15)

PROGRESS ENERGY FLORIDA, INC. ("PEF"), pursuant to Rule 28-106.206, Florida Administrative Code, and Rule 1.340, Florida Rules of Civil Procedure, hereby responds to Staff's First Set of Interrogatories (Nos. 1-15).

### **RESPONSES**

1. Please identify whether Progress Energy's existing purchased power contracts with Southern Company contain deadlines for Progress to seek contract renewal or extension.

**RESPONSE:** The existing purchased power contracts with the Southern Companies, specifically, the 1988 Unit Power Sales Agreements, do not contain deadlines for seeking contract renewal or extension.

2. Please discuss how the new UPS agreements compare with the existing 1988 UPS agreements with Southern Company.

RESPONSE: The 1988 UPS agreement provided for the sale of firm capacity from a share of Alabama Power Company's Miller Units 1-4, and a share of Scherer Unit 3, jointly owned by Georgia Power Company and Gulf Power Company. The total capacity provided is currently 414 MW based on Progress Energy's pro rata share of the units provided for in the agreement. All of the units specified in the agreement are coal-fired. The 1988 UPS agreement expires May 31, 2010.

The new UPS agreements provide firm power from Scherer Unit 3 (74 MW), and Franklin Unit 1, (350 MW), a natural gas-fired combined cycle unit, a total of 424 MW. The new agreements provide essentially the same amount of firm power to the Florida-Georgia interface (424 vs. 414 MW), under terms and conditions similar to the 1988 agreement, reflecting, of course, provision of a portion of the power from a combined cycle unit, rather than pulverized coal units. Some of the differences resulting from

buying from a combined cycle unit are discussed in subsequent responses. The new agreements expire December 31, 2015, with an option for Progress Energy to extend the Franklin portion of the purchase through December 31, 2017.

3. Please describe any dispatch rights Progress will have for Scherer Unit 3 and Franklin Unit 1 under the Unit Power Sales Agreements.

**RESPONSE:** The requested information includes confidential proprietary business information. Accordingly, the answer to this interrogatory is being field with the Commission's Division of Records and Reporting along with a Notice of Intent to Seek Confidential Classification.

4. Please discuss whether Progress will use network or point-to-point transmission service for the Southern Company agreements. If point-to-point, please identify these locations. When does Progress anticipate obtaining firm transmission service for delivery of the contracted power?

**<u>RESPONSE</u>**: The energy supplied under the new agreements will be delivered via point-to-point transmission service.

For Scherer Unit 3 and Franklin Unit 1, the power will be delivered from the substations where the facilities interconnect to the Georgia Integrated Transmission System at the transmission system voltage to the Florida-Georgia interface.

The new agreements call for Progress Energy to submit a request for transmission service within 30 days of the effective date of the agreements, and a request has been submitted for transmission service to both Southern Company and Progress Energy. The agreements also call for having transmission service in place by February, 2006. It is currently anticipated that service will be finalized on or before the agreement deadline.

5. Please identify the anticipated cost of transmission rights under the Southern Company agreements. Please break out the cost for the segment within the SERC region (to the Florida-Georgia interface) and the segment within the FRCC region.

**RESPONSE:** The transmission price used for delivery of power from both the Scherer and Franklin facilities through the Southern system was \$1.94/kW-month. No cost was assumed for delivery through the Progress Energy system as the delivered power will be considered a system network resource from the Florida-Georgia interface.

6. Page 3 of the petition describes how energy charges for the Southern Company agreements will be based on a guaranteed heat rate at the Franklin unit but an actual heat rate at the Scherer unit. Please explain why different heat rates are used.

**RESPONSE:** The requested information includes confidential proprietary business information. Accordingly, the answer to this interrogatory is being field with the Commission's Division of Records and Reporting along with a Notice of Intent to Seek Confidential Classification.

7. Progress has stated that its right-of-first refusal to additional capacity from Scherer Unit 3 is no longer valid. How does this impact the potential benefits associated with the UPS agreements? Will Progress retain its right-of-first refusal to other coal capacity on the Southern system on an as-available basis, as mentioned on page 5 of the petition?

**RESPONSE:** In conjunction with the UPS agreements, Progress Energy obtained rights-of-first-refusal for additional coal capacity from more than one facility on the Southern system. Thus, even though the Scherer Unit 3 capacity is no longer available, Progress Energy still retains a right-of-first refusal for additional coal capacity. As stated in the Petition, any such purchases would provide additional low-cost capacity and further contribute to fuel diversity. This potential benefit was not included in the company's economic analysis. Thus, the potential benefits described in the Petition have not changed.

8. Page 5 of the petition states that the contracts "offer a 'bridge' of sorts, providing coal-based energy in a time frame that construction of new coal facilities would not be possible, until a point in time where new coal facilities could be considered." Please discuss Progress Energy's current efforts to determine the cost-effectiveness and feasibility of developing coal capacity in the future.

**RESPONSE:** Progress Energy has contracted with Burns & McDonnell to develop the cost and performance parameters for solid fuel facilities in Florida, and has performed detailed economic analyses based on the results of the engineering analysis. Siting studies to determine feasible sites for coal-based generation are underway.

The results of the economic analysis indicate that a pulverized coal unit would be the economic self-build option in the 2015 time frame, based on life cycle economics. However, the results also show there is considerable risk in commitment to a coal unit introduced by large front end capital requirements, as well as a relatively long payback period when compared to a combined cycle unit. Based on the analyses performed to date, the payback period for pulverized coal, compared to combined cycle, varies from 15 to 20 years, depending on the cost assumptions used. Increasing spreads between natural gas and coal prices shortens the payback period.

. . .

These studies are currently being updated to reflect more recent forecasts of fuel prices and updated cost assumptions for the technologies.

9. Exhibit D of the petition provides the cost savings from the proposed Southern Company UPS agreements. Please provide the net present value analysis, on an annual and cumulative basis, to determine anticipated savings, including the assumptions used in developing the analysis. Does the cancellation of Progress Energy's right-of-first refusal on additional capacity from Scherer Unit 3 impact the results of the analysis?

**RESPONSE:** The year-by-year analysis and the assumptions used are provided in the attached spreadsheets. The termination of Progress Energy's right-of-first-refusal option for additional coal-fired capacity from Scherer Unit 3 has no impact on the analysis, as the benefits of this option were not included.

The alternative resource plans (with and without the Southern UPS contract) are included in Spreadsheet #1, which PEF previously provided to Staff under a pending Request for Confidentiality filed on February 18, 2005, along with the analysis performed using unit carrying charge rates, which yield results based on the full life cycle of the units included in the resource plans. This spreadsheet does not include any savings from potential economy transactions.

Spreadsheet 2, which also was previously submitted to staff under the February, 2004 Request for Confidentiality, provides the hourly economy transaction detail and savings over the period June 1, 2010 through December 31, 2015. The savings are presented as 100% of the calculated potential.

Spreadsheet 3, which also was previously submitted to staff under the February, 2004 Request for Confidentiality, provides the economic analysis on a revenue requirements basis, in other words, showing the year-by-year savings of the UPS contract. The economy savings are shown as a line item adjustment in the spreadsheet

10. How does the assumption on economy purchases used to develop Exhibit D compare to the actual economy purchases completed as a result of the existing UPS agreements with Southern Company?

**RESPONSE:** The economy purchases used to develop Exhibit D would be expected to be higher than the actual economy purchases that might be associated with the existing agreement. This is a natural result of the fact that the existing agreement provides all of its energy from coal units, which would be expected to be called upon most of the time, up to their availability, resulting in little, if any, opportunity to purchase economy energy using the same transmission interface.

The new agreement calls for a portion of the provided energy to come from the Franklin combined cycle unit, which would not be expected to provide energy at as high a capacity factor as a coal unit. In developing the economy energy assumptions in Exhibit D, it was assumed that the Scherer capacity would be used all of the time, and that economy energy would be available only when the Franklin unit was not expected to be called upon. Thus, the maximum economy transaction that could take place would be 350 MW (of the total 424 MW purchased from Southern), and only in an hour when Franklin was not expected to run. In addition to this assumption, the availability of economy energy in any hour was generally assumed to be less than the Franklin capability, i.e., less than 350 MW, to be conservative. The actual hourly availability assumptions are shown in Spreadsheet 2, which previously was provided to Staff under the February 2004 Request for Confidentiality.

11. Page 6, lines 9-11 of Mr. Waters' testimony in Docket No. 040001-EI provides the cost analysis from the proposed Southern Company contracts under "alternative assumptions regarding the availability of economy energy from the Southern system." Please explain what these alternative assumptions were, and identify how Progress Energy's cost analysis of the actual agreements, as provided in Exhibit D in Docket No. 041393-EI, would be affected by these alternative assumptions.

**RESPONSE:** For both the testimony referenced in this question, and the petition for contract approval, the analysis of the contract economics was performed using the same "base" and "alternative" assumptions regarding the purchase of economy energy.

For the "base" or expected level of economy energy transactions, the following assumptions were used:

- Transactions could occur only when the Franklin unit was not scheduled, and only in an amount up to the available capacity (350 MW).
- The availability of economy energy was further discounted by assuming that the market liquidity, or availability of energy, would be limited to between 100 MW and 250 MW in most hours (less than the total 350 MW of transmission capacity available when Franklin was not scheduled).
- Transactions would only occur when the "spread" between the Progress Energy marginal price and the available energy price in the Southern region was \$3.00 or greater, and when the price of available FRCC energy was greater than the price of available Southern energy. In other words, it was assumed that Progress would take advantage of economy energy in the Florida market first, then Southern. Benefits of buying in The Florida market were not included in the analysis.

The "alternative" assumptions simply took 50% of the "base" level of economy, multiplying the dollars of savings in any given time period by 50%. This was an arbitrary assumption to be extremely conservative in the analysis.

12. Given that Progress expects the capacity from the proposed Southern Company contracts to defer the need for a May 2010 combined cycle unit, please explain why Progress did not issue a Request for Proposals for the combined cycle unit.

RESPONSE: PEF was not required under Commission rules or precedent to issue a Request for Proposals in connection with the UPS agreements. Furthermore, the opportunity to replace the power from the existing UPS contract was, and is, considered to be a limited one. If Progress did not pursue this opportunity now, there is a high probability that the power from these units would be sold elsewhere. In addition to providing economic power, these agreements preserve the transmission path that Progress currently has into the Southern system, which provides access to the southeastern market and enhanced system reliability.

In this instance, the combined cycle is viewed as a backup plan to replacing the existing contracts with essentially similar new contracts, and an RFP would not be required for a 2010 unit until 2006. These new agreements provide unique benefits beyond the provision of firm capacity that are not likely to be found through an RFP. If Progress Energy were to lose the availability of the transmission path to Georgia and the energy available in the southeastern region, the company believes that this would result in long-term economic harm to its customers.

13. Please discuss whether there have been any significant changes in the status of Progress' efforts to obtain firm transmission service from Southern Company to the Florida-Georgia interface since Samuel Waters' April 15, 2005 testimony was filed.

**RESPONSE:** On April 12, 2005, Southern Company sent PEF a notice stating that a System Impact Study would be required to determine available transmission capacity. On or before April 18, 2005, PEF submitted a signed original of the System Impact Study agreement. Payment in the amount of \$10,000 was wire transferred to Southern Company on April 21, 2005 for the System Impact Study to be performed. Southern Company has acknowledged receipt of PEF's payment and has signed the System Impact Study.

. .

14. Please discuss whether Progress has the right under the agreements to redirect transmission in order to make economy sales out of the contracted generating units.

**RESPONSE:** The new agreements do not address any rights regarding transmission, as transmission service is provided by Southern Company as transmission provider. The agreements do allow for sale of economy energy out of the contracted units. For Progress to take advantage of this potential, scheduling of the units under the terms of the agreements would be necessary, as well as requesting the redirection of transmission under the separate transmission service agreement.

15. Please discuss any provisions of the contract which will affect Progress' ability to make economy sales or purchases as compared to Progress' ability to make these sales or purchases under the existing contracts.

RESPONSE: There are two primary differences between the existing agreements and the new agreements that will affect Progress' ability to sell and purchase economy energy. First, as discussed in the answer to Interrogatory No. 10, the existing agreements provide energy from coal units, which Progress would be expected to take for system needs, leaving very few, if any, hours where economy energy would be purchased instead. The new agreements provide energy from both coal and combined cycle units, and in those hours that the combined cycle unit would not normally be dispatched, there would be an opportunity to buy economy energy, as well as an opportunity to sell that combined cycle energy elsewhere. In other words, Progress will buy the energy when economic for its own customers, sell it when it is not.

The second difference is the scheduling flexibility provided under the new agreements versus the old. As discussed in the response to Interrogatory No. 3, the existing agreements require scheduling of the energy from the contracted units to a certain minimum level. The increased scheduling flexibility of the new agreements would allow Progress to better take advantage of opportunities as they arise.

# PRIVILEGED & CONFIDENTIAL ATTORNEY/CLIENT COMMUNICATION ATTORNEY WORK PRODUCT

## **AFFIDAVIT**

STATE OF NORTH CAROLINA	)	
	)	
COUNTY OF WAKE	)	

I hereby certify that on this  $2^{+}$  day of May, 2005, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared Samuel S. Waters, who is personally known to me, and he has review the foregoing answers to from Staff's First Set of Interrogatories to Progress Energy Florida, Inc. (Nos. 1 - 15) in Docket No. 041393-EI, and that the responses are true and correct based on his/her personal knowledge.

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 9 th day of May, 2005.

AUSLIC COUNTY THIRTHE

Notary Public

State of North Carolina

My Commission Expires: 7-6-6 §

## **CERTIFICATE OF SERVICE**

I hereby certify that true and correct copies of the foregoing have been provided

by e-mail and by U.S. Mail, postage pre-paid, on May 2005, to the following:

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Nan V.
Attorney

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: 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.

DOCKET NO. 041393-EI

SERVED: May 10, 2005

# PROGRESS ENERGY FLORIDA'S RESPONSE TO STAFF'S FIRST REQUEST FOR PRODUCTION OF DOCUMENTS (NO. 1)

PROGRESS ENERGY FLORIDA, INC. ("PEF"), pursuant to Rule 28-106.206, Florida Administrative Code (FAC), and Rule 1.350, Florida Rules of Civil Procedure, hereby responds to Staff's First Request for Production of Documents (No. 1).

1. Please provide a copy of the agreement(s) which provides Progress with the right-offirst refusal for specified coal capacity on Southern's system if this capacity becomes available.

**Response:** The documents requested include confidential proprietary business information and, therefore, are being filed under separate cover along with a notice of intent to request confidential classification in accordance with Rule 25-22.006, FAC.

SERVED this day of May, 2005.

R. Alexander Glenn
Deputy General Counsel
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Progress Energy Service Company, L.L.C.
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Florida Bar No. 855898

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Attorneys for Progress Energy Florida, Inc.

## **CERTIFICATE OF SERVICE**

I hereby certify that true and correct copies of the foregoing have been provided by e-mail and by U.S. Mail, postage pre-paid, on May 2005, to the following:

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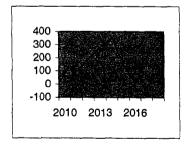
Adrienne E. Vining, Esq. Senior Counsel Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850

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Deputy General Counsel
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St. Petersburg, FL 33701-3324

Discount rate Es

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scalation rate	2.50%

	NPV	2010	2011	2012	2013	2014	2015
Base Case Capital Rev Req							
2010 CC		144	139	133	128	123	119
2012 CC				151	146	140	135
2017 Coal							
2019 CT							
Total		144	139	285	274	263	253
With Southern Rev Req							
2011 CC			148	142	137	131	126
2018 CC			170	172	137	131	120
2015 Coal							403
2017 CT							400
Total		0	148	142	137	131	530
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Delta Capital Costs	-98	-144	9	-142	-137	-132	276
Delta Prod Cost	54	6	15	19	18	18	18
Other Purchase Costs	67	8	15	15	15	15	15
Net	23	-130	39	-109	-104	-99	309
Cum NPV (BOY payments)		-130	-94	-187	-269	-342	-133
Total Savings (Cost), NPV		132	99	194	278	353	145
Economy Savings		2	5	7	9	11	12
	2004 \$						
Delta Capital Costs	-61						
Delta Prod Cost	34						
Other Purchase Costs	42						
Net	14						
		0	0	0	0	0	0





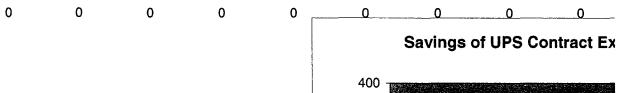
2016	2017	2018	2019	2020	2021	2022	2023	2024
114	110	105	101	97	93	88	84	80
130	125	120	115	111	106	102	97	93
	424	404	391	378	366	354	343	332
			103	100	95	91	87	83
244	658	629	710	685	660	635	611	588
122	117	112	108	104	99	95	91	86
		175	169	162	156	150	145	139
385	372	360	348	337	327	316	307	297
	98	95	91	87	83	79	76	73
506	587	743	716	690	665	641	617	595
263	-71	113	5	5	5	5	6	6
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217	-63	117	5	5	5	5	6	6
3	-34	29	32	34	36	38	40	42
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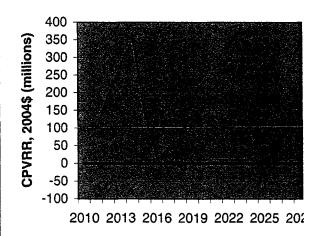
2025	2026	2027	2028	2029	2030	2031	2032	2033
76	71	67	63	59	54	51	48	46
88	84	79	75	70	66	61	57	53
322	312	302	291	281	271	261	251	240
80	76	73	69	66	62	59	55	52
566	543	521	498	476	453	432	411	391
00	ning sing	70	00	0.4	00			40
82	77	73	69	64	60	56	52	49
134	128	123	118	113	108	102	97	92
287	277	268	258	248	238	229	219	209
69	66	63	59 504	56 484	53 450	49	46	43
572	549	527	504	481	459	436	414	394
6	6	6	6	5	5	4	3	3
0	0	0	0	0	0	0	0	0
6	6	6	6	5	5	4	3	3
44	46	47	49	50	51	52	52	53
-32	-34	-35	-37	-38	-39	-40	-40	-41
12	12	12	12	12	12	12	12	12
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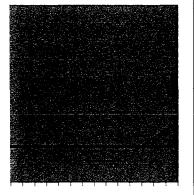
2034	2035	2036	2037	2038	2039	2040	2041	2042
43	267	257	247	238	229	220	211	203
51	48	45	280	270	260	250	240	231
230	220	210	199	192	187	182	176	171
48	46	44	42	40	38	36	35	33
372	580	556	769	740	713	688	663	638
47	44	274	263	253	244	234	225	217
87	82	77	71	66	62	59	56	52
200	190	183	178	173	168	163	158	153
42	40	38	36	35	33	31	29	182
375	356	571	549	527	506	487	469	605
3	-225	15	-220	-213	-207	-200	-194	-34
3	-225	15	-220	-213	-207	-200	-194	-34
53	22	24	-3	-27	-48	-67	-84	-87
-41	-10	-12	15	39	60	79	96	99
12	12	12	12	12	12	12	12	12





2043	2044	2045	2046	2047	2048	2049	2050	2051
195	187	180	172	164	156	148	140	132
222	214	205	197	189	180	172	164	155
166	161	156	151	146	141	135	130	125
31	191	185	177	169	161	154	148	141
615	753	726	696	667	638	610	582	554
208	200	192	184	176	168	160	152	144
325	313	301	290	279	268	258	248	238
148	143	139	134	129	124	119	114	109
176	168	161	154	147	141	134	128	122
858	825	793	761	730	700	671	642	613
243	71	67	65	64	62	61	60	59
243	71	67	65	64	62	61	60	59
-68	-63	-59	-55	-52	-49	-46	-43	-41
80	75	71	67	64	61	58	55	53
12	12	12	12	12	12	12	12	12

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2052	2053	2054	2055	2056
124	116	109	101	94
147	139	131	122	114
120	115	110	105	100
135	128	122	115	109
526	499	471	443	417
136	127	119	111	103
228	219	209	200	190
104	100	95	1083	1033
116	110	104	98	91
584	556	527	1491	1417
58	57	56	1048	1001
58	57	56	1048	1001
-39	-37	-35	-4	23
51	49	47	16	-11
12	12	12	12	12
0	0	0	0	0

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: 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.

DOCKET NO. 041393-EI

**SERVED: MAY 13, 2005** 

# PROGRESS ENERGY FLORIDA'S ANSWERS TO STAFF'S SECOND SET OF INTERROGATORIES (NOS. 16 - 21)

PROGRESS ENERGY FLORIDA, INC. ("PEF"), pursuant to Rule 28-106.206, Florida Administrative Code, and Rule 1.340, Florida Rules of Civil Procedure, hereby responds to Staff's Second Set of Interrogatories (Nos. 16-21).

## **ANSWERS**

16. On page 2 of Mr. Waters' supplemental direct testimony, he mentions two reasons for the overstatement of benefits of the UPS contracts. Which change had the greatest impact, the change in revenue requirements or the partial in-service year?

A. The change in revenue requirements had the greatest impact on the change in economics of the agreements. The changes in revenue requirements are provided in response to Interrogatory No. 20.

17. Please explain how the annual revenue requirements changed for each unit included in both base case and alternative case. This should include the unit type, in-service date, item that changed (i.e. installed cost, O&M, heat rate, financial parameter, etc.). Please also include an explanation as to how these errors were detected.

A. The change in revenue requirements was limited to the capital portion of the revenue requirements calculation. The changes applied to all of the units that changed in-service dates between the resource plans with and without the Unit Power Sales purchases from the Southern Companies.

Units which were deferred by the purchases:

May, 2010 Combined cycle deferred to May, 2011

May, 2012 Combined cycle deferred to May, 2018

Units which advanced due to the purchases:

May, 2017 Pulverized coal unit advanced to December, 2015

May, 2019 Combustion Turbine unit advanced to May, 2017

The in-service dates refer to the first day of the indicated month.

The errors were detected when reviewing data files that had been produced in response to a discovery requests in this docket. PEF revised its analysis. Below are the capital revenue requirements for the period 2010-2015 included in the original analysis:

D. O. O. Yal Day D.	NPV	2010	2011	2012	2013	2014	2015
Base Case Capital Rev Re 2010 CC 2012 CC 2017 Coal	<u>q (\$M)</u>	144	139	133 151	128 146	123 140	119 135
2019 CT Total		144	139	285	274	263	253
With Southern Rev Reg (\$ 2011 CC 2018 CC	<u>M)</u>		148	142	137	131	126
2015 Coal 2017 CT							403
Total		0	148	142	137	131	530

The corrected capital revenue requirements, <u>assuming units placed in service on January 1</u>, are shown below:

PROGRESS ENERGY FLORIDA'S ANSWERS TO STAFF'S SECOND SET OF INTERROGATORIES (NOS. 16 - 21) DOCKET NO. 041393-EI PAGE 3

	ln-						
Base Case Capital Rev Req	service						
<u>(\$M)</u>	month	2010	2011	2012	2013	2014	2015
2010 CC	1	56	53	51	49	47	45
2012 CC	1	*		59	56	54	51
2017 Coal	1						
2019 CT	1						
Total		56	53	110	105	101	97
With Court on Day Day (011)							
With Southern Rev Reg (\$M)							
2011 CC	1		57	54	52	50	48
2018 CC	1						
2015 Coal	1						139
2017 CT	1						
Total		0	57	54	52	50	187

# 18. Please explain which unit(s) were affected by partial year's in-service values. The response to this interrogatory should include detailed revenue requirement information by unit and an explanation as to how this error was detected.

A. All of the units listed in the response to Interrogatory 17 were impacted by the partial year change. In the course of rerunning the analysis it was realized that costs and benefits were overstated by assigning 12 months of unit capital revenue requirements to those years when the unit would not be in service for the entire year. For example, as shown in Interrogatory 17, many of the units were projected to be placed in service on May 1, so only eight (8) months of that year's revenue requirements would properly be associated with the cost or benefit of that unit. The coal unit, placed in service in December, 2015, should only be assigned 1 month of revenue requirement, rather than the 12 month assignment of the first analysis.

The final analysis, which includes both the changes in revenue requirements and the partial inservice year revenue requirements is shown below:

	In- service						
Base Case Capital Rev Req (\$M)	month	2010	2011	2012	2013	2014	2015
2010 CC	5	37	54	52	50	48	46
2012 CC	5			39	57	54	52
2017 Coal	- 5						
2019 CT	5						
Total		37	54	91	106	102	98
With Southern Rev Reg (\$M)							
2011 CC	5		38	55	53	51	49
2018 CC	5						
2015 Coal	12						12
2017 CT	5						
Total		0	38	55	53	51	61

19. On page 2 of Mr. Waters' supplemental direct testimony, he states that the net present value benefits over the first five years of the contracts goes from \$133 million to \$44 million due to the revisions discussed in Interrogatory No. 16. In other words, a net present value benefit of \$89 million over the first five years was lost due to the corrections being proposed. Please explain how a benefit of this magnitude in the early years of an analysis, can have little to no effect on the long term present value analysis? Is PEF proposing a term longer than 45 years for the analysis?

A. The year-by-year analysis was completely independent of the original long-term present value analysis. The year-by-year analysis attempted to translate the long-term analysis into a form where the timing of savings could be shown. The long-term analysis was performed using economic carrying charge (ECC) rates, which account for the savings or costs that result from a one year deferral or advancement of a capital expenditure. Using these rates, the net cost or benefit is quantified through the lifetime of the asset, including any end effects that may result from unequal asset lives. For example, when comparing a combined cycle unit, which has a 25 year life, to a pulverized coal unit, which has a 40 year life, there must be an accounting for the fact that the coal unit will be in place for 15 years beyond the economic life of the combined cycle unit. In the annual revenue requirements analysis, this is done by replacing the combined

cycle unit in year 26, and continuing a comparison of costs. However, now the second combined cycle unit will be in place to the fiftieth year of the analysis, ten years beyond the life of the coal unit. This mismatch will continue until a point where the remaining lives of the assets become equal, in this case resulting in a 200 year analysis. The use of the ECC rates avoids this problem, but does not produce year-by-year results.

The year-by-year annual revenue requirements analysis did not utilize the ECC rates. The year-by-year analysis was performed to examine the approximate economics during the term of the contract, 2010-2015. The error in the year-by-year analysis was in the calculation of the annual unit revenue requirements. These annual unit revenue requirements were not used in the long-term analysis that determined the overall costs and benefits. Thus, the error in the year-by-year analysis does not impact these results of the long-term analysis. As discussed in Mr. Waters Direct Testimony of April 15, 2005, the long-term showed a net cost to customers of between \$5 and \$11 million dollars, NPV. This result has not changed and PEF is not proposing a term longer than 45 years for the analysis.

20. Please provide the annual and cumulative present value revenue requirements associated with the revised analysis described by Mr. Waters' supplemental direct testimony. These values should be for both the base case without the UPS contracts and the alternative case that includes the UPS contracts.

A. The annual and cumulative net present values for the original analysis, shown for the period 2010-2015, are given below:

PROGRESS ENERGY FLORIDA'S ANSWERS TO STAFF'S SECOND SET OF INTERROGATORIES (NOS. 16 - 21) DOCKET NO. 041393-EI PAGE 6

	NPV	2010	2011	2012	2013	2014	2015
Base Case Capital Rev Re	q (\$M)						
2010 CC		144	139	133	128	123	119
2012 CC				151	146	140	135
2017 Coal							
2019 CT							
Total		144	139	285	274	263	253
With Southern Rev Reg (\$	<u>M)</u>						
2011 CC			148	142	137	131	126
2018 CC							
2015 Coal							403
2017 CT							
Total		0	148	142	137	131	530
Dolto Canital Casta	-98	-144	9	-142	-137	-132	076
Delta Capital Costs							276
Delta Prod Cost Other Purchase	54	6	15	19	18	18	18
Costs	67	8	15	15	15	15	15
Net	23	-130	39	-109	-104	-99	309
Cum NPV (BOY payments)	20						
Culline v (bot payments)		-130	-94	-187	-269	-342	-133

Negative numbers indicate savings. The annual and cumulative net present values for the revised analysis, shown for the period 2010-2015, are given below:

	ln-						
Base Case Capital Rev Req	service						
<u>(\$M)</u>	month	2010	2011	2012	2013	2014	2015
2010 CC	5	37	54	52	50	48	46
2012 CC	5			39	57	54	52
2017 Coal	5						
2019 CT	5						
Total		37	54	91	106	102	98
With Southern Rev Reg (\$M)							
2011 CC	5		38	55	53	51	49
2018 CC	5						
2015 Coal	12						12
2017 CT	5						
Total		0	38	55	53	51	61
Delta Capital Costs (\$M)		-37	-16	-35	-53	-51	-38
Delta Prod Costs (\$M)		6	15	19	18	18	18
Other Purchase Costs (\$M)		8	15	15	15	15	15
Net (\$M)	,	-23	14	-2	-20	-19	-5
Cum NPV (2010 \$)		-23	-10	-12	-27	-41	-44

21. Based on the supplemental direct testimony of Mr. Waters, do any of the responses to staff's earlier interrogatories or production of documents need to be amended? If so, please provide an amendment to each discovery request as necessary.

A. Spreadsheet 3, referenced in response to Interrogatory No. 9, has been updated for the revised analysis and attached hereto. The original Spreadsheet 3 was not submitted along with a request for confidential status as indicated in the original answer to Interrogatory No. 9. No other responses to staff's earlier interrogatories or production of documents need to be corrected.

#### AFFIDAVIT

# STATE OF NORTH CAROLINA)

COUNTY OF	Franklin
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In Witness Whereof, I have hereunto set my hand and scal in the State and County aforesaid as of this 137<sup>H</sup> day of MAY, 2005.



No. Commission Surban 44.04.0178

Notary Public
State of North Carolina, at Large

My Commission Expires:

Discount rate Escalation rate	8.16% 2.50%													
Annual Fixed Charge Rates	CT CC Coal	0.1923 0.1975 0.1805	0.1843 0.1876 0.1720	0.1761 0.1805 0.1663	0.1684 0.1737 0.1609	0.1610 0.1671 0.1557	0.1541 0.1607 0.1507	0.1476 0.1546 0.1460	0.1411 0.1486 0.1414	0.1347 0.1428 0.1371	0.1283 0.1371 0.1327	0.1219 0.1313 0.1284	0.1155 0.1256 0.1240	0.1091 0.1198 0.1197
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Capital Required (\$K) CT CC Coal	2004\$ 60249 243337 585030													
Base Case Capital Rev Reg (\$K) 2010 CC 2012 CC 2017 Coal 2019 CT Total	In-service month 5 5 5 5	37164 37164	53877 53877	51605 39046 90651	49651 56604 106255	47767 54218 101985	45950 52164 98115	44195 50186 94380	42495 48277 97054 187826	40848 46432 141004 228284	39224 44647 135657 11185 230713	37602 42916 131210 16313 228042	35981 41210 126965 15603 219759	34359 39506 122906 14915 211686
With Southern Rev Reg (\$K) 2011 CC 2018 CC 2015 Coal 2017 CT Total	-5 5 12 5	0	38094 38094	55224 55224	52895 52895	50892 50892	48962 11547 60509	47099 138022 185121	45299 131668 10646 187613	43558 45281 127317 15527 231683	41870 65643 123168 14851 245532	40205 62876 119204 14196 236481	38542 60494 115412 13578 228026	36880 58200 111778 12993 219851
Delta Capital Costs (\$K)		-37,164	-15,783	-35,427	-53,359	-51,093	-37,606	90,741	-213	3,399	14,819	8,439	8,268	8,165
Delta Prod Costs (\$K) Other Purchase Costs (\$K) Net (\$K) Cum NPV (2010 \$)		5,589 8,478 -23,097 -23,097	15,497 14,584 14,298 -9,878	18,806 14,670 -1,952 -11,547	18,485 14,760 -20,114 -27,443	17,689 14,849 -18,555 -41,001	17,716 14,935 -4,954 -44,348	-45,161 0 45,579 -15,880	7,794 0 7,582 -11,501	4,253 0 7,652 -7,416	0 0 14,819 -101	0 0 8,439 3,751	0 0 8,268 7,239	0 0 8,165 10,424

0.1027 0.1141 0.1153	0.0963 0.1083 0.1110	0.0899 0.1026 0.1066	0.0849 0.0969 0.1023	0.0815 0.0911 0.0979	0.0780 0.0854 0.0936	0.0745 0.0796 0.0892	0.0711 0.0739 0.0849	0.0676 0.0692 0.0816	0.0641 0.0657 0.0794	0.0607 0.0621 0.0772	0.0572 0.0586 0.0751	0.0729	0.0707	0.0685	0.0663	0.0641
2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
32738	31116	29494	27873	26251	24630	23008	21387	19972	18867	17865	16863	74411	99884	95673	92049	88558
37802	36099	34395	32691	30988	29284	27580	25877	24173	22469	20983	19822	18770	17717	78178	104941	100516
119020	115293	111714	108198	104690	101183	97675	94167	90659	87151	83643	80136	76628	73120	69612	66687	64636
14265	13650	13067	12503	11943	11384	10825	10265	9706	9147	8587	8028	7554	7209	6906	6604	6301
203825	196158	188670	181265	173873	166480	159088	151695	144509	137634	131078	124849	177362	197930	250369	270281	260012
35218	33556	31894	30232	28570	26908	25245	23583	21921	20471	19338	18312	17285	76271	102381	98065	94351
55986	53847	51776	49770	47791	45815	43839	41863	39888	37912	35936	33960	31985	30009	28033	26057	24334
108292	104932	101593	98255	94916	91577	88238	84899	81561	78222	74883	71544	68205	64936	62498	60823	59148
12437	11900	11368	10835	10303	9771	9238	8706	8173	7641	7190	6861	6574	6286	5998	5710	5422
211933	204235	196632	189092	181579	174070	166561	159052	151543	144246	137348	130678	124049	177501	198911	190655	183254
8,108	8,077	7,962	7,827	7,707	7,590	7,473	7,357	7,033	6,612	6,269	5,829	-53,313	-20,429	-51,459	-79,626	-76,758
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8,108	8,077	7,962	7,827	7,707	7,590	7,473	7,357	7,033	6,612	6,269	5,829	-53,313	-20,429	-51,459	-79,626	-76,758
13,349	16,042	18,497	20,728	22,759	24,609	26,292	27,824	29,179	30,356	31,388	32,275	24,773	22,116	15,926	7,071	-821

0.0620	0.0598	0.0576	0.0554	0.0532	0.0511	0.0489	0.0467	0.0445	0.0423							
2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056
85190	81934	78784	75731	72719	69713	66706	63700	60694	57687	54681	51675	48668	45662	42656	39649	37026
96709	93041	89502	86082	82772	79565	76401	73242	70083	66925	63766	60608	57449	54291	51132	47974	44815
62876	61116	59356	57596	55836	54076	52317	50557	48797	47037	45277	43517	41757	39997	38238	36478	34718
5999 250774	5696 241788	5394 233036	5091 224501	22401 233728	30243 233597	28927 224351	27651 215150	26447 206021	25307 196956	24225 187949	23179 178979	22142 170017	21105 161055	20068 152094	19031 143132	17994
230174	241700	233030	224501	233720	233331	224331	210100	200021	190930	101343	170919	170017	101000	152094	143132	134553
90772	87319	83983	80754	77624	74537	71456	68374	65293	62211	59130	56048	52967	49885	46804	43722	40641
22987	21767	20547	90662	121699	116568	112153	107900	103795	99829	95991	92270	88601	84938	81275	77612	73950
57473	55798	54123	52448	50773	49098	47423	45748	44072	42397	40722	39047	37372	35697	34022	60784	370597
5134	4846	21321	28786	27533	26319	25172	24087	23058	22062	21075	20088	19101	18114	17127	16140	15153
176366	169730	179973	252649	277629	266522	256204	246109	236218	226500	216918	207454	198041	188635	179228	198259	500340
-74,407	-72,058	-53,063	28,149	43,901	32,925	31,853	30,959	30,197	29,543	28,968	28,475	28,024	27,579	27,134	55,127	365,787
0	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	Ō	ő	Ö	Ö
-74,407	-72,058	-53,063	28,149	43,901	32,925	31,853	30,959	30,197	29,543	28,968	28,475	28,024	27,579	27,134	55,127	365,787
-7,894	-14,227	-18,539	-16,424	-13,375	-11,260	-9,369	-7,670	-6,137	-4,751	-3,494	-2,352	-1,312	-367	493	2,109	12,021

#### BEFORE THE PUBLIC SERVICE COMMISSION

In re: 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.

DOCKET NO. 041393-EI

DATED: MAY 23, 2005

# PROGRESS ENERGY FLORIDA'S ANSWERS TO STAFF'S THIRD SET OF INTERROGATORIES (NOS. 22 - 23)

PROGRESS ENERGY FLORIDA, INC. ("PEF"), pursuant to Rule 28-106.206, Florida Administrative Code, and Rule 1.340, Florida Rules of Civil Procedure, hereby responds to Staff's Third Set of Interrogatories (Nos. 22-23).

#### **INTERROGATORIES & ANSWERS**

- 22. Please refer to PEF's response to staff's interrogatory number 17. Explain specifically how and why the capital portion of the revenue requirements calculation changed for each of the units in PEF's revised analysis. Assuming the 2010 combined cycle unit is placed in service on January 1, 2010, provide an example calculation of revenue requirements in year 2010 for this unit. This example should show specifically how revenue requirements changed from \$144 million in PEF's original analysis, to \$56 million, as provided in PEF's response to interrogatory number 17.
- A. PEF has been unable to duplicate the \$144 million revenue requirements figure shown in the original analysis and no record of that calculation has been located after diligent search. However, PEF's calculation of the revised revenue requirement of \$56 million presented in response to Interrogatory No. 17 and used in the revised analysis presented in Mr. Waters Supplemental Testimony is explained below.

Three of the spreadsheets used to calculate the revised figures for a combined cycle unit, inservice in January of 2010, are provided in composite Exhibit "A" and fourth spreadsheet PAGE 2

containing confidential data is being provided along with a Request for Confidential

Classification. Year-by-year revenue requirement factors, or carrying charge rates are

shown in the spreadsheet "FL TreasCC CCw.xls", in column C of the tab "Summary".

Detailed calculations, along with all assumptions, are included in the spreadsheet. The year-

by-year factors are multiplied by the installed cost of the combined cycle, which is obtained

from the values shown in 2004\$ in the spreadsheet, "FL\_Generic Unit

Char 2004 0407.xls", under the tab "Unit Characteristics", by multiplying the unit rating,

shown in cell C7, by the total capital required per kW, shown in cell C20. These values are

obtained under license from the EPRI Technical Assessment Guide (TAG) and are therefore

being filed with the Request for Confidential Classification referenced above.

The attached spreadsheets show the following values for a combined cycle unit:

Year 1 Carrying Charge Rate = 0.1975

Unit Rating = 536.232 MW

Unit Total capital required = 453.79 \$/kW (2004\$)

Since these are 2004\$, the installed cost must be escalated from 2004 to 2009:

Installed Cost = 536.232 MW \* 453.79 kw = \$243,337 (000's, 2004\$)

 $= $243,337 * (1.025)^6 = $282,196 (000's, 2010)$ 

An inflation rate of 2.5% per year was used in the original studies.

This installed cost yields a first year revenue requirement of:

\$282,196 \* .1975 = \$55,733 (000's, nominal \$)

PROGRESS ENERGY FLORIDA'S ANSWERS TO STAFF'S

THIRD SET OF INTERROGATORIES (NOS. 22 - 23)

**DOCKET NO. 041393-EI** 

PAGE 3

The year-by-year calculation of savings shows this figure rounded to 56 because it is printed

to zero decimal places.

The changes to the year-by year revenue requirements for each of the affected units are

shown in the accompanying spreadsheets. The spreadsheet "SoCo Extension Annual Cost

Analysis.xls" contains the original calculations from 2010 through 2056 for all affected

units. The spreadsheet "SoCo Extension Annual Cost Analysis rev p.xls" contains the

revised revenue requirements for all affected units.

23. Refer to the corrected spreadsheet number three provided in response to staff's interrogatory number 21. Are the assumed annual fixed charge rates and total capital

required (\$K in 2004\$) on revised spreadsheet number three the same as in PEF's original revenue requirements analysis? If not, please provide the assumptions for the

annual fixed charge rates and total capital required used in PEF's original analysis.

A. Because PEF cannot duplicate the revenue requirements in the original analysis, the only

figure that can be determined to be the same is the total capital required. The original

carrying charges rates that were applied cannot be ascertained.

SERVED this day of May, 2005.

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Attorney for PROGRESS ENERGY FLORIDA

# COMPOSITE EXHIBIT A

### $FL\_TreasCC\_CCw.xls$

#### **PROGRESS ENERGY**

### Revenue Requirements/NPV Spreadsheet CC Winter"(FL)"2x5547.748 MW - Input/Output Summary

#### **Outputs**

Discount Rate	8.16%	
Real Capital Cost	5.52%	
Capital Carrying Cost	14.38%	
PVRR	667.11	\$/kW
PVRR/\$100 Investment	151.51	\$/\$100
Book Basis Total Plant Investment Cost	440.30	\$/kW
TOTAL CAPITAL REQUIRED	443.48	\$/kW
Economic Carrying Charge	51.088	\$/kW
Levelized	63.33	\$/kW
Levelized/Month	5.28	\$/kW/Month

#### Inputs

CC Winter (FL)	
그리아 아이를 잃는 걸을 모르는 것	
375.48	
13.15	
0.00	
388.64	
25	
20	
1.0600%	
0.000%	35.2
4	
1.07	
2.11	
3.19	
0	At Time of
0	Removal/Salvage
	(FL) 2x5547.748 MW 375.48 13.15 0.00 388.64 25 20 1.0600% 0.000% 4 1.07 2.11 3.19

 Year
 -3
 -2
 -1
 0

 Construction Escalation Rate
 2.50%
 2.50%
 2.50%
 2.50%

 Capital Cost Cash Flow
 7.90%
 54.90%
 24.10%
 13.10%

62.80%

86.90%

100.00%

391.82

7.90%

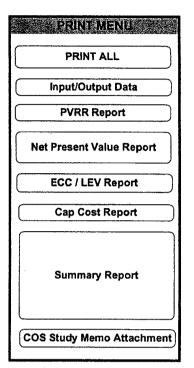
 CAPITAL STRUCTURE
 Rate
 Ratio
 PMDb Reference File:
 Financials\_2004\_0902.xls

 Debt/AFUDC
 6.50%
 48.00%
 Financials\_2004\_0902.xls

 Preferred
 0.00%
 0.00%
 Financials\_2004\_0902.xls

 Common
 12.00%
 52.00%
 Financials\_2004\_0902.xls

 Composite Tax Rate
 38.58%
 52.00%



0.00%

0.00%

0.00%

0.00%



Total Investment inc. land (\$/kW)

Cumulative Cash Flow (= 100.00%)

	Inservice										
	Year	-3	-2	-1	0	1	2	3	4	5	6
Net Investment - Start of Year	0.0	000	0.000	0.000	0.000	100.000	96.027	92.055	88.082	84.110	80.137
Net Investment - End of Year	0.0	000	0.000	0.000	0.000	96.027	92.055	88.082	84.110	80.137	76.164
Book Depreciation	0.0	000	0.000	0.000	0.000	3.973	3.973	3.973	3.973	3.973	3.973
Deferred Taxes	-0.0	080	-0.737	-1.628	-2.141	0.091	1.377	1.176	0.991	0.819	0.660
Earnings Base	0.6	000	0.080	0.817	2.445	104.586	100.523	95.173	90.024	85.061	80.270
Debt 48.00% @ 6.50%	0.0	900	0.002	0.025	0.076	3.263	3.136	2.969	2.809	2.654	2.504
Preferred 0.00% @ 0.00%	0.0	000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Common 52.00% @ 12.00%	0.0	000	0.005	0.051	0.153	6.526	6.273	5.939	5.618	5.308	5.009
Depreciation, Deferred Taxes, and Return	-0.0	080	-0.729	-1.552	-1.912	13.853	14.759	14.057	13.389	12.753	12.146
Net Investment (Tax)	0.0	000	0.000	0.000	0.000	96.802	93.197	86.259	79.841	73.904	68.413
Tax Depreciation Based on a 20 year tax life	0.0	000	0.000	0.000	0.000	3.604	6.938	6.418	5.937	5.491	5.080
Capitialized Interest	0.2	207	1.910	4.220	5.550	0.000	0.000	0.000	0.000	0.000	0.000
Interest Deduction	0.0	000	0.002	0.025	0.076	3.263	3.136	2.969	2.809	2.654	2.504
After Tax Taxable Income	0.	27	1.178	2.643	3.561	6.985	4.684	4.670	4.644	4.608	4.562
Income Tax	0.0	080	0.740	1.660	2.237	4.388	2.942	2.933	2.917	2.894	2.865
Investment tax Credit	0.0	000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Income Tax Revenue Requirements	0.0	080	0.740	1.660	2.237	4.388	2.942	2.933	2.917	2.894	2.865
Overhead	0.0	000	0.000	0.000	0.000	1.060	1.060	1.060	1.060	1.060	1.060
Total Investment Related Revenue Requirements	0.0	000	0.011	0.108	0.325	19.300	18.761	18.050	17.366	16.707	16.071
Present Worth Factor at 8.16%	1.2	165	1.170	1.082	1.000	0.925	0.855	0.790	0.731	0.676	0.625
Present Worth of:											
Return	0.0	000	0.009	0.083	0.229	9.051	8.043	7.041	6.158	5.380	4.694
Depreciation	0.0	000	0.000	0.000	0.000	3.673	3.396	3.140	2.903	2.684	2.482
Income Taxes	0.	01	0.866	1.796	2.237	4.057	2.515	2.318	2.132	1.956	1.790
Deferred Taxes	-0.1	01	-0.862	-1.761	-2.141	0.084	1.177	0.930	0.724	0.553	0.412
Overhead	0.0	000	0.000	0.000	0.000	0.980	0.906	0.838	0.775	0.716	0.662
Total Investment Related Rev, Requirements	0.0	000	0.012	0.117	0.325	17.845	16.038	14.267	12.691	11.289	10.040
Cumulative Revenue Requirements	0.0	000	0.012	0.130	0.454	18.299	34.337	48.604	61.295	72.584	82.624
Revenue Requirements (\$000s)	0	.00	0.05	0.48	1.43	84.98	82.60	79.47	76.46	73.56	70.76
PVRR (\$000s)	66	7.1									

(L)

	Year	7	8	9	10	11	12	13	14	15	16
Net Investment - Start of Year		76.164	72.192	68.219	64.247	60.274	56.301	52.329	48.356	44.383	40.411
Net investment - End of Year		72.192	68,219	64.247	60.274	56.301	52.329	48.356	44.383	40.411	36.438
Book Depreciation		3.973	3.973	3.973	3.973	3.973	3.973	3.973	3.973	3.973	3.973
Deferred Taxes		0.513	0.377	0.355	0.355	0.355	0.355	0.355	0.355	0.355	0.355
Earnings Base		75.637	71.152	66.802	62.475	58.148	53.821	49.493	45.166	40.839	36.512
Debt 48.00% @ 6.50%		2.360	2.220	2.084	1.949	1.814	1.679	1.544	1.409	1.274	1.139
Preferred 0.00% @ 0.00%		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Common 52.00% @ 12.00%		4.720	4.440	4.168	3.898	3.628	3.358	3.088	2.818	2.548	2.278
Depreciation, Deferred Taxes, and Return		11.565	11.009	10.580	10.175	9.770	9.365	8.960	8.555	8.150	7.745
Net Investment (Tax)		63.333	58.635	54.288	50.000	45.712	41.423	37.135	32.847	28.559	24.270
Tax Depreciation Based on a 20 year tax life		4.699	4.346	4.288	4.288	4.288	4.288	4.288	4.288	4.288	4.288
Capitialized Interest		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Interest Deduction		2.360	2.220	2.084	1.949	1.814	1.679	1.544	1.409	1.274	1.139
After Tax Taxable Income		4.507	4.443	4.207	3.937	3.667	3.397	3.127	2.857	2.587	2.317
Income Tax		2.831	2.791	2.643	2.473	2.304	2.134	1.964	1.795	1.625	1.456
Investment tax Credit		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Income Tax Revenue Requirements		2.831	2.791	2.643	2.473	2.304	2.134	1.964	1.795	1.625	1.456
Overhead		1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060
Total Investment Related Revenue Requirements		15.456	14.860	14.283	13.708	13.133	12.559	11.984	11.409	10.835	10.260
Present Worth Factor at 8.16%		0.578	0.534	0.494	0.457	0.422	0.390	0.361	0.334	0.308	0.285
Present Worth of:											
Return		4.089	3.557	3.087	2.670	2.297	1.966	1.672	1.410	1.179	0.975
Depreciation		2.295	2.122	1.962	1.814	1.677	1.550	1.434	1.325	1.225	1.133
Income Taxes		1.635	1.490	1.305	1.129	0.972	0.833	0.709	0.599	0.501	0.415
Deferred Taxes		0.296	0.201	0.175	0.162	0.150	0.138	0.128	0.118	0.109	0.101
Overhead		0.612	0.566	0.523	0.484	0.447	0.414	0.383	0.354	0.327	0.302
Total Investment Related Rev, Requirements		8.928	7.936	7.052	6.258	5.544	4.901	4.324	3.807	3.342	2.926
Cumulative Revenue Requirements		91.551	99.487	106.540	112.798	118.342	123.243	127.568	131.374	134.717	137.643
Revenue Requirements (\$000s) PVRR (\$000s)		68.05	65.43	62.89	60.36	57.83	55.30	52.77	50.24	47.71	45.18

	Year 17	18	19	20	21	22	23	24	25
Net Investment - Start of Year	36.438	32.466	28.493	24.520	20.548	16.575	12.603	8.630	4.657
Net Investment - End of Year	32.466	28.493	24.520	20.548	16.575	12.603	8.630	4.657	0.685
Book Depreciation	3.973	3.973	3.973	3.973	3.973	3.973	3.973	3.973	3.973
Deferred Taxes	0.355	0.355	0.355	0.355	-0.473	-1.300	-1.300	-1.300	-1.300
Earnings Base	32.185	27.857	23.530	19.203	14.876	11.376	8.703	6.030	3.358
Debt 48.00% @ 6.50%	1.004	0.869	0.734	0.599	0.464	0.355	0.272	0.188	0.105
Preferred 0.00% @ 0.00%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Common 52,00% @ 12.00%	2.008	1.738	1.468	1.198	0.928	0.710	0.543	0.376	0.210
Depreciation, Deferred Taxes, and Return	7.340	6.935	6.530	6.125	4.892	3.738	3.487	3.237	2.987
Net Investment (Tax)	19.982	15.694	11.406	7.117	2.829	0.685	0.685	0.685	0.685
Tax Depreciation Based on a 20 year tax life	4.288	4.288	4.288	4.288	2.144	0.000	0.000	0.000	0.000
Capitialized Interest	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Interest Deduction	1.004	0.869	0.734	0.599	0.464	0.355	0.272	0.188	0.105
After Tax Taxable Income	2.047	1.777	1.507	1.237	2.284	3.383	3.216	3.049	2.882
Income Tax	1.286	1.116	0.947	0.777	1.435	2.125	2.020	1.915	1.810
Investment tax Credit	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Income Tax Revenue Requirements	1.286	1.116	0.947	0.777	1.435	2.125	2.020	1.915	1.810
Overhead	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1,060	1.060
Total Investment Related Revenue Requirements	9.686	9.111	8.536	7.962	7.387	6.922	6.567	6.212	5.857
Present Worth Factor at 8.16%	0.264	0.244	0.225	0.208	0.193	0.178	0.165	0.152	0.141
Present Worth of:									
Return	0.794	0.636	0.496	0.375	0.268	0.190	0.134	0.086	0.044
Depreciation	1.048	0.969	0.896	0.828	0.766	0.708	0.654	0.605	0.559
Income Taxes	0.339	0.272	0.213	0.162	0.276	0.379	0.333	0.292	0.255
Deferred Taxes	0.094	0.086	0.080	0.074	-0.091	-0.232	-0.214	-0.198	-0.183
Overhead	0.280	0.258	0.239	0.221	0.204	0.189	0.175	0.161	0.149
Total Investment Related Rev, Requirements	2.554	2.221	1.924	1.659	1.424	1.233	1.082	0.946	0.825
Cumulative Revenue Requirements	140.197	142.419	144.343	146.003	147.426	148.660	149.741	150.688	151.513
Revenue Requirements (\$000s) PVRR (\$000s)	42.65	40.12	37.59	35.06	32.53	30.48	28.92	27.35	25.79

	Year	Years -3 - 25	Uniform
Net Investment - Start of Year		1308.218	
Net Investment - End of Year		1208.903	
Book Depreciation		99.315	
Deferred Taxes		0.000	
Earnings Base		1266.141	
Debt 48.00% @ 6.50%		39.504	
Preferred 0.00% @ 0.00%		0.000	
Common 52,00% @ 12.00%		79.007	
Depreciation, Deferred Taxes, and Return		217.826	
Net Investment (Tax)		994.385	
Tax Depreciation Based on a 20 year tax life		96.117	
Capitialized Interest		11.887	
Interest Deduction		39.504	
After Tax Taxable Income		94.092	
Income Tax		59.103	
Investment tax Credit		0.000	
Income Tax Revenue Requirements		59.103	
Overhead		26.500	
Total Investment Related Revenue Requirements		303.429	
Present Worth Factor at 8.16%		15.050	
Present Worth of:		0.000	
Return		66.613	6.324
Depreciation		41.847	3.973
Income Taxes		31.877	3.026
Deferred Taxes		0.010	0.001
Overhead		11.166	1.060
Total Investment Related Rev, Requirements Cumulative Revenue Requirements		151.513	14.384

Revenue Requirements (\$000s) PVRR (\$000s)

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PROGRESS ENERGY Net Present Value CC Winter (FL) 2x5547.748 MW Page 1

						Inservice					
	Year	-3	-2	-1	0	1	2	3	4	5	6
EESY Methodology											
Investment		(28.51)	(203.08)	(91.38)	(50.91)	0.00	0.00	0.00	0.00	0.00	0.00
Salvage		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CPI		0.93	8.51	18.64	24.47	13.86					
Depreciation		0.00	0.00	0.00	0.00	16.40	31.57	29.20	27.01	24.98	23.11
Property Taxes		0.00	0.00	0.00	0.00	3.96	3.96	3.96	3.96	3.96	3.96
Taxable Income		0.93	8.51	18.64	24.47	(6.50)	(35.53)	(33.16)	(30.97)	(28.95)	(27.07)
Income Tax Paid		0.36	3.28	7.19	9.44	(2.51)	(13.71)	(12.79)	(11.95)	(11.17)	(10.44)
Property Taxes		0.00	0.00	0.00	0.00	3.96	3.96	3.96	3.96	3.96	3.96
Total Taxes Paid		0.36	3.28	7.19	9.44	1.45	(9.74)	(8.83)	(7.99)	(7.20)	(6.48)
Discounted Investment		(37.51)	(247.06)	(102.78)	(52.95)	0.00	0.00	0.00	0.00	0.00	0.00
Discounted Taxes		0.47	4.00	8.09	9.82	1.40	(8.66)	(7.26)	(6.07)	(5.06)	(4.21)
Discounted Net Cashflow		(37.98)	(251.05)	(110.87)	(62.77)	(1.40)	8.66	7.26	6.07	5.06	4.21
Cumulative Discounted Net Cashflow NPV		(37.98) (406.38)	(289.04)	(399.91)	(462.67)	(464.07)	(455.41)	(448.15)	(442.08)	(437.02)	(432.81)
PVRR Methodology											
Investment		(28.51)	(203.08)	(91.38)	(50.91)	0.00	0.00	0.00	0.00	0.00	0.00
Salvage		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AFUDC		1.14	10.54	23.50	31.25						
CPI		0.91	8.41	18.58	24.44						
Depreciation		0.00	0.00	0.00	0.00	15.87	30.55	28.26	26.14	24.18	22.37
Property Taxes		0.00	0.00	0.00	0.00	4.67	4.67	4.67	4.67	4.67	4.67
Taxable Income		0.91	8.41	18.58	24,44	(20.54)	(35.22)	(32.93)	(30.81)	(28.85)	(27.03)
Income Tax Paid		0.35	3.24	7.17	9.43	(7.92)	(13.59)	(12.70)	(11.89)	(11.13)	(10.43)
Property Taxes		0.00	0.00	0.00	0.00	4,67	4.67	4.67	4.67	4.67	4.67
Total Taxes Paid		0.35	3.24	7.17	9.43	(3.26)	(8.92)	(8.04)	(7.22)	(6.46)	(5.76)
Discounted Investment		(37.51)	(247.06)	(102.78)	(52.95)	0.00	0.00	0.00	0.00	0.00	0.00
Discounted Taxes		0.45	3.79	7.75	9.43	(3.01)	(7.63)	(6.35)	(5.27)	(4.37)	(3.60)
Discounted Net Cashflow		(37.96)	(250.85)	(110.54)	(62.37)	3.01	7.63	6.35	5.27	4.37	3.60
Cumulative Discounted Net Cashflow NPV		(37.96) (409.90)	(288.81)	(399.35)	(461.72)	(458.71)	(451.08)	(444.73)	(439.46)	(435.09)	(431.49)
PVRR = NPV/(1-Tax Rate)		667.375									
PVRR (Fm PVRR Model)		667.109									

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#### PROGRESS ENERGY Net Present Value CC Winter"(FL)"2x5547.748 MW

	Year	7	8	9	10	11	12	13	14	15	16
EESY Methodology											
Investment		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salvage		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CPI											
Depreciation		21.38	19.77	19.51	19.51	19.51	19.51	19.51	19.51	19.51	19.51
Property Taxes		3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96
Taxable Income		(25.34)	(23.74)	(23.47)	(23.47)	(23.47)	(23.47)	(23.47)	(23.47)	(23.47)	(23.47)
Income Tax Paid		(9.78)	(9.16)	(9.06)	(9.06)	(9.06)	(9.06)	(9.06)	(9.06)	(9.06)	(9.06)
Property Taxes		3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96
Total Taxes Paid		(5.81)	(5.19)	(5.09)	(5.09)	(5.09)	(5.09)	(5.09)	(5.09)	(5.09)	(5.09)
Discounted Investment		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Discounted Taxes		(3.49)	(2.88)	(2.62)	(2.42)	(2.24)	(2.07)	(1.91)	(1.77)	(1.63)	(1.51)
Discounted Net Cashflow		3.49	2.88	2.62	2.42	2.24	2.07	1.91	1.77	1.63	1.51
Cumulative Discounted Net Cashflow NPV		(429.31)	(426.43)	(423.81)	(421.40)	(419.16)	(417.09)	(415.18)	(413.42)	(411.78)	(410.27)
PVRR Methodology						•					
Investment		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salvage		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AFUDC											
CPI											
Depreciation		20.69	19.14	18.88	18.88	18.88	18.88	18.88	18.88	18.88	18.88
Property Taxes		4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67
Taxable Income		(25.36)	(23.80)	(23.55)	(23.55)	(23.55)	(23.55)	(23.55)	(23.55)	(23.55)	(23.55)
Income Tax Paid		(9.78)	(9.18)	(9.08)	(9.08)	(9.08)	(9.08)	(9.08)	(9.08)	(9.08)	(9.08)
Property Taxes		4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67
Total Taxes Paid		(5.11)	(4.52)	(4.42)	(4.42)	(4.42)	(4.42)	(4.42)	(4.42)	(4.42)	(4.42)
Discounted Investment		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Discounted Taxes		(2.95)	(2.41)	(2.18)	(2.02)	(1.86)	(1.72)	(1.59)	(1.47)	(1.36)	(1.26)
Discounted Net Cashflow		2.95	2.41	2.18	2.02	1.86	1.72	1.59	1.47	1,36	1.26
Cumulative Discounted Net Cashflow		(428.54)	(426.13)	(423.94)	(421.93)	(420.06)	(418.34)	(416.74)	(415.27)	(413.91)	(412.65)
NPV											

PVRR = NPV/(1-Tax Rate) PVRR (Fm PVRR Model)



# PROGRESS ENERGY Net Present Value CC Winter (FL) 2x5547.748 MW

	Year	17	18	19	20	21	22	23	24	25
EESY Methodology										
Investment		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salvage		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.02
CPI										
Depreciation		19.51	19.51	19.51	19.51	9.75	0.00	0.00	0.00	0.00
Property Taxes		3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96
Taxable Income		(23.47)	(23.47)	(23.47)	(23.47)	(13.72)	(3.96)	(3.96)	(3.96)	(0.95)
Income Tax Paid		(9.06)	(9.06)	(9.06)	(9.06)	(5.29)	(1.53)	(1.53)	(1.53)	(0.37)
Property Taxes		3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96
Total Taxes Paid		(5.09)	(5.09)	(5.09)	(5.09)	(1.33)	2.43	2.43	2.43	3.60
Discounted Investment		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
Discounted Taxes		(1.40)	(1.29)	(1.19)	(1.10)	(0.27)	0.45	0.42	0.39	0.53
Discounted Net Cashflow		1.40	1.29	1.19	1.10	0.27	(0.45)	(0.42)	(0.39)	(0.10)
Cumulative Discounted Net Cashflow NPV		(408.88)	(407.58)	(406.39)	(405.29)	(405.02)	(405.47)	(405.89)	(406.27)	(406.38)
PVRR Methodology										
Investment		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salvage		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.02
AFUDC										
CPI										
Depreciation		18.88	18.88	18.88	18.88	9.44	0.00	0.00	0.00	0.00
Property Taxes		4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67
Taxable Income		(23.55)	(23.55)	(23.55)	(23.55)	(14.11)	(4.67)	(4.67)	(4.67)	(1.65)
Income Tax Paid		(9.08)	(9.08)	(9.08)	(9.08)	(5.44)	(1.80)	(1,80)	(1.80)	(0.64)
Property Taxes		4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67
Total Taxes Paid		(4.42)	(4.42)	(4.42)	(4.42)	(0.78)	2.87	2.87	2.87	4.03
Discounted Investment		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
Discounted Taxes		(1.16)	(1.08)	(1.00)	(0.92)	(0.15)	0.51	0.47	0.44	0.57
Discounted Net Cashflow		1.16	1.08	1.00	0.92	0.15	(0.51)	(0.47)	(0.44)	(0.14)
Cumulative Discounted Net Cashflow		(411.48)	(410.41)	(409.41)	(408.49)	(408.34)	(408.85)	(409.32)	(409.76)	(409.90)
NPV		()	(,	(,	()	(100.01)	(100.00)	()	(1000)	()

PVRR = NPV/(1-Tax Rate) PVRR (Fm PVRR Model)

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# PROGRESS ENERGY Economic & Levelized Carrying Charge CC Winter (FL) 2x5547.748 MW

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						Inservice					
	Year	-3	-2	-1	0	1	2	3	4	5	6
Economic Carrying Charge						(51.09)	(51.09)	(51.09)	(51.09)	(51.09)	(51.09)
Inflation Factor						1.00	1.03	1.05	1.08	1.10	1.13
Inflated Carrying Charge						(51.09)	(52.36)	(53.67)	(55.02)	(56.39)	(57.80)
Income Taxes Paid						(19.71)	(20.20)	(20.71)	(21.23)	(21.76)	(22.30)
Discounted Investment						(47.23)	(44.76)	(42.42)	(40.20)	(38.10)	(36.11)
Discounted Taxes						(18.22)	(17.27)	(16.37)	(15.51)	(14.70)	(13.93)
Discounted Net Cashflow						(29.01)	(27.49)	(26.06)	(24.69)	(23.40)	(22.18)
Cumulative Discounted Net Ca	shflow					(29.01)	(56.51)	(82.56)	(107.26)	(130.66)	(152.84)
NPV		(409.90)									
Levelized Carrying Charge						(63.33)	(63.33)	(63.33)	(63.33)	(63.33)	(63.33)
Income Taxes Paid						(24.43)	(24.43)	(24.43)	(24.43)	(24.43)	(24.43)
Discounted Investment						(58.55)	(54.14)	(50.06)	(46.28)	(42.79)	(39.56)
Discounted Taxes						(22.59)	(20.89)	(19.31)	(17.86)	(16.51)	(15.26)
Discounted Net Cashflow						(35.96)	(33.25)	(30.74)	(28.43)	(26.28)	(24.30)
Cumulative Discounted Net Ca	shflow					(35.96)	(69.22)	(99.96)	(128.39)	(154.67)	(178.97)
NPV		(409.74)									



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# PROGRESS ENERGY Economic & Levelized Carrying Charge CC Winter (FL) 2x5547.748 MW

Year	7	8	9	10	11	12	13	14	15	16
Economic Carrying Charge	(51.09)	(51.09)	(51.09)	(51.09)	(51.09)	(51.09)	(51.09)	(51.09)	(51.09)	(51.09)
Inflation Factor	1.16	1.19	1.22	1.25	1.28	1.31	1.34	1.38	1.41	1.45
Inflated Carrying Charge	(59.25)	(60.73)	(62.25)	(63.80)	(65.40)	(67.03)	(68.71)	(70.42)	(72.19)	(73.99)
Income Taxes Paid	(22.86)	(23.43)	(24.01)	(24.61)	(25.23)	(25.86)	(26.51)	(27.17)	(27.85)	(28.55)
Discounted Investment	(34.22)	(32.43)	(30.74)	(29.13)	(27.60)	(26.16)	(24.79)	(23.50)	(22.27)	(21.10)
Discounted Taxes	(13.20)	(12.51)	(11.86)	(11.24)	(10.65)	(10.09)	(9.57)	(9.06)	(8.59)	(8.14)
Discounted Net Cashflow	(21.02)	(19.92)	(18.88)	(17.89)	(16.95)	(16.07)	(15.23)	(14.43)	(13.68)	(12.96)
Cumulative Discounted Net Cashflow NPV	(173.86)	(193.78)	(212.65)	(230.54)	(247.50)	(263.57)	(278.79)	(293.23)	(306.90)	(319.86)
									•	
Levelized Carrying Charge	(63.33)	(63.33)	(63.33)	(63.33)	(63.33)	(63.33)	(63.33)	(63.33)	(63.33)	(63.33)
Income Taxes Paid	(24.43)	(24.43)	(24.43)	(24.43)	(24.43)	(24.43)	(24.43)	(24.43)	(24.43)	(24.43)
Discounted Investment	(36.58)	(33.82)	(31.27)	(28.91)	(26.73)	(24.72)	(22.85)	(21.13)	(19.54)	(18.06)
Discounted Taxes	(14.11)	(13.05)	(12.06)	(11.15)	(10.31)	(9.54)	(8.82)	(8.15)	(7.54)	(6.97)
Discounted Net Cashflow	(22.47)	(20.77)	(19.21)	(17.76)	(16.42)	(15.18)	(14.04)	(12.98)	(12.00)	(11.09)
Cumulative Discounted Net Cashflow NPV	(201.44)	(222.21)	(241.42)	(259.18)	(275.59)	(290.78)	(304.81)	(317.79)	(329.79)	(340.88)

PROGRESS ENERGY Economic & Levelized Carrying Charge CC Winter"(FL)"2x5547.748 MW

Year	17	18	19	20	21	22	23	24	25
Economic Carrying Charge	(51.09)	(51.09)	(51.09)	(51.09)	(51.09)	(51.09)	(51.09)	(51.09)	(51.09)
Inflation Factor	1.48	1.52	1.56	1.60	1.64	1.68	1.72	1.76	1.81
Inflated Carrying Charge	(75.84)	(77.74)	(79.68)	(81.67)	(83.71)	(85.81)	(87.95)	(90.15)	(92.40)
Income Taxes Paid	(29.26)	(29.99)	(30.74)	(31.51)	(32.30)	(33.10)	(33.93)	(34.78)	(35.65)
Discounted Investment	(20.00)	(18.95)	(17.96)	(17.02)	(16.13)	(15.29)	(14.49)	(13.73)	(13.01)
Discounted Taxes	(7.72)	(7.31)	(6.93)	(6.57)	(6.22)	(5.90)	(5.59)	(5.30)	(5.02)
Discounted Net Cashflow	(12.28)	(11.64)	(11.03)	(10.46)	(9.91)	(9.39)	(8.90)	(8.43)	(7.99)
Cumulative Discounted Net Cashflow	(332.15)	(343.79)	(354.82)	(365.28)	(375.19)	(384.58)	(393.48)	(401.91)	(409.90)
NPV									
Lovelined Counting Charge	(62.22)	(00.00)	(62.22)	(00.00)	(00.22)	(62.22)	(en 22)	(62.22)	(62.22)
Levelized Carrying Charge	(63.33)	(63.33)	(63.33)	(63.33)	(63.33)	(63.33)	(63.33)	(63.33)	(63.33)
Income Taxes Paid	(24.43)	(24.43)	(24.43)	(24.43)	(24.43)	(24.43)	(24.43)	(24.43)	(24.43)
Discounted Investment	(16.70)	(15.44)	(14.28)	(13.20)	(12.20)	(11.28)	(10.43)	(9.65)	(8.92)
Discounted Taxes	(6.44)	(5.96)	(5.51)	(5.09)	(4.71)	(4.35)	(4.03)	(3.72)	(3.44)
Discounted Net Cashflow	(10.26)	(9.48)	(8.77)	(8.11)	(7.50)	(6.93)	(6.41)	(5.92)	(5.48)
Cumulative Discounted Net Cashflow NPV	(351.14)	(360.62)	(369.39)	(377.50)	(385.00)	(391.93)	(398.34)	(404.26)	(409.74)

### PLANT INVESTMENT COST INPUT DATA for

Technology C Winter"(FL)"2x5547.748 MW
Total Plant Cost 388.6367454 \$/kW
Lead Time 4 years

Year	-3	-2	-1	0
Construction Escalation Rate	2.50%	2.50%	2.50%	2.50%
Capital Cost Cash Flow	7.90%	54.90%	24.10%	13.10%
Cumulative Cash Flow	7.90%	62.80%	86.90%	100.00%
AFUDC / Discount Rate	8.16%	8.16%	8.16%	8.16%
CPI Rate(Cost of Debt)	6.50%	6.50%	6.50%	6.50%
(\$1,000)				
Progress Payment	28.51	203.08	91.38	50.91
AFUDC	1.14	10.54	23.50	31.25
	1.14	4.55	4.90	7.99
Plant Investment Cost	29.65	213.62	114.87	82.16
Cumulative Plant Investment Cost	29.65	243.27	358.14	440.30
Capitalized Interest	0.91	8.41	18.58	24.44
Cumulative Capitalized Interest	0.91	9.32	27.90	52.34
Plant Tax Investment	29.42	211.49	109.96	75.35
Cumulative Plant Tax Investment	29.42	240.91	350.87	426.22
Progress Payment % of Total Progress Payments	0.07625	0.54317	0.24440	0.13617
Progress Payments	0.07020	0.04317	0.24440	0.13017

#### Percent of Book Basis Total Plant Investment

		lotal Plant Investme
(\$1,000)		
Total Progress Payments	373.879	84.91%
Total AFUDC	66.420	15.09%
Book Basis Total Plant Investment Cost	440.299 \$/kW	
Tax Basis Direct Cost	426.217	96.80%
Basis Difference	-52.338	-11.89%

Land, Chemicals and inventory 3.186
TOTAL CAPITAL REQUIRED 443.484

#### CC Winter (FL) 2x5547.748 MW Book Life of 25 Years Tax Recovery Period is 20 Years Discount Rate is 8.16%

Year	Year by Year Carrying Charges	Cumulative Present Value of Carrying Charges	Levelized Carrying Charges	Present Value Factor	Annuity Factor	WASP Input - Cumulative Present Value of Carrying Charges
-3						
-2						
-1						
0						
1	0.1975	0.1826	0.1975	0.9246	0.9246	0.0000
2	0.1876	0.3430	0.1928	0.8549	1.7795	0.1735
3	0.1805	0.4857	0.1890	0.7904	2.5698	0.3278
4	0.1737	0.6126	0.1856	0.7308	3.3006	0.4650
5	0.1671	0.7255	0.1825	0.6757	3.9763	0.5871
6	0.1607	0.8259	0.1795	0.6247	4.6010	0.6957
7	0.1546	0.9152	0.1767	0.5776	5.1787	0.7923
8	0.1486	0.9945	0.1741	0.5341	5.7127	0.8781
9	0.1428	1.0651	0.1716	0.4938	6.2065	0.9544
10	0.1371	1.1276	0.1692	0.4565	6.6630	1.0221
11	0.1313	1.1831	0.1670	0.4221	7.0851	1.0820
12	0.1256	1.2321	0.1648	0.3903	7.4754	1.1350
13	0.1198	1.2753	0.1627	0.3608	7.8363	1.1818
14	0.1141	1.3134	0.1608	0.3336	8.1699	1.2230
15	0.1083	1.3468	0.1589	0.3085	8.4784	1.2591
16	0.1026	1.3761	0.1570	0.2852	8.7636	1.2908
17	0.0969	1.4016	0.1553	0.2637	9.0273	1.3184
18	0.0911	1.4238	0.1536	0.2438	9.2711	1.3424
19	0.0854	1.4431	0.1520	0.2254	9.4966	1.3632
20	0.0796	1.4597	0.1504	0.2084	9.7050	1.3812
21	0.0739	1.4739	0.1489	0.1927	9.8977	1.3966
22	0.0692	1.4863	0.1475	0.1782	10.0759	1.4099
23	0.0657	1.4971	0.1462	0.1647	10.2406	1.4216
24	0.0621	1.5065	0.1450	0.1523	10.3929	1.4319
25	0.0586	1.5148	0.1438	0.1408	10.5338	1.4408

### SoCo Extension\_Annual Cost Analysis.xls

Escalation rate	2.50%																							
		IPV	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Base Case Capital Re	v Req																							
2010 CC	-		144	139	133	128	123	119	114	110	105	101	97	93	88	84	80	76	71	67	63	59	54	51
2012 CC					151	146	140	135	130	125	120	115	111	106	102	97	93	88	84	. 79	75	70	66	61
2017 Coal										424	404	391	378	366	354	343	332	322	312	302	291	281	271	261
2019 CT												103	100	95	91	87	83	80	76	73	69	66	62	59
Total			144	139	285	274	263	253	244	658	629	710	685	660	635	611	588	566	543	521	498	476	453	432
With Southern Rev Re	<b>2</b> 4																							
2011 CC				148	142	137	131	126	122	117	112	108	104	99	95	91	86	82	77	73	69	64	60	56
2018 CC											175	169	162	156	150	145	139	134	128	123	118	113	108	102
2015 Coal								403	385	372	360	348	337	327	316	307	297	287	277	268	258	248	238	229
2017 CT										98	95	91	87	83	79	76	73	69	66	63	59	56	53	49
Total			0	148	142	137	131	530	506	587	743	716	690	665	641	617	595	572	549	527	504	481	459	436
Delta Capital Costs		-98	-144	9	-142	-137	-132	276	263	-71	113	5	5	5	5	6	6	6	6	6	6	5	5	4
Delta Prod Cost		54	6	15	19	18	18	18	-45	8	4	0	0	0	0	0	. 0	0	0	0	0	0	0	0
Other Purchase Costs		67	8	15	15	15	15	15	0	ō	0	Ŏ	ō	•	•	•	•	•	•	-	•	•		
Net		23	-130	39	-109	-104	-99	309	217	-63	117	5	5	5	5	6	6	6	6	6	6	5	5	4
Cum NPV (BOY payme	ents)		-130	-94	-187	-269	-342	-133	3	-34	29	32	34	36	38	40	42	44	46	47	49	50	51	52

	NPV 2004 \$
Delta Capital Costs	-61
Delta Prod Cost	34
Other Purchase Costs	42
Net	14

Discount rate

8.16%





2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056
48	46	43	267	257	247	238	229	220	211	203	195	187	180	172	164	156	148	140	132	124	116	109	101	94
57	53	51	48	45	280	270	260	250	240	231	222	214	205	197	189	180	172	164	155	147	139	131	122	114
251	240	230	220	210	199	192	187	182	176	171	166	161	156	151	146	141	135	130	125	120	115	110	105	100
55	52	48	46	44	42	40	38	36	35	33	31	191	185	177	169	161	154	148	141	135	128	122	115	109
411	391	372	580	556	769	740	713	688	663	638	615	753	726	696	667	638	610	582	554	526	499	471	443	417
52	49	47	44	274	263	253	244	234	225	217	208	200	192	184	176	168	160	152	144	136	127	119	111	103
97	92	87	82	77	71	66	62	59	56	52	325	313	301	290	279	268	258	248	238	228	219	209	200	190
219	209	200	190	183	178	173	168	163	158	153	148	143	139	134	129	124	119	114	109	104	100	95	1083	1033
46	43	42	40	38	36	35	33	31	29	182	176	168	161	154	147	141	134	128	122	116	110	104	98	91
414	394	375	356	571	549	527	506	487	469	605	858	825	793	761	730	700	671	642	613	584	556	527	1491	1417
3	3	3	-225	15	-220	-213	-207	~200	-194	-34	243	71	67	65	64	62	61	60	59	58	57	56	1048	1001
0	0																							
3	3	3	-225	15	-220	-213	-207	-200	-194	-34	243	71	67	65	64	62	61	60	59	58	57	56	1048	1001
52	53	63	22	24		27	40	67	04	07		00		ce.	50	40	40	40	44		0.7	25	. ,	22

### SoCo Extension\_Annual Cost Analysis\_rev.xls

Discount rate Escalation rate	8.16% 2.50%								
Annual Fixed Charge Rates									
•	CT	0.1923	0.1843	0.1761	0.1684	0.1610	0.1541	0.1476	0.1411
	CC	0.1975	0.1876	0.1805	0.1737	0.1671	0.1607	0.1546	0.1486
	Coal	0.1805	0.1720	0.1663	0.1609	0.1557	0.1507	0.1460	0.1414
		2010	2011	2012	2013	2014	2015	2016	2017
Total Capital Required (\$K)	2004\$								
CT	60249								
CC	243337								
Coal	585030								
	In-service								
Base Case Capital Rev Req (\$K)	month								
2010 CC	5	37164	53877	51605	49651	47767	45950	44195	42495
2012 CC	5			39046	56604	54218	52164	50186	48277
2017 Coal	5								97054
2019 CT	5								
Total		37164	53877	90651	106255	101985	98115	94380	187826
With Southern Rev Reg (\$K)									
2011 CC	5	•	38094	55224	52895	50892	48962	47099	45299
2018 CC	5								
2015 Coal	12						11547	138022	131668
2017 CT	5								10646
Total		0	38094	55224	52895	50892	60509	185121	187613
Delta Capital Costs (\$K)		-37,164	-15,783	-35,427	-53,359	-51,093	-37,606	90,741	-213
Delta Prod Costs (\$K)		5,589	15,497	18,806	18,485	17,689	17,716	-45,161	7,794
Other Purchase Costs (\$K)		8,478	14,584	14,670	14,760	14,849	14,935	0	0
Net (\$K)		-23,097	14,298	-1,952	-20,114	-18,555	-4,954	45,579	7,582
Cum NPV (2010 \$)		-23,097	-9,878	-11,547	-27,443	-41,001	-44,348	-15,880	-11,501

·	0.1347 0.1428 0.1371	0.1283 0.1371 0.1327	0.1219 0.1313 0.1284	0.1155 0.1256 0.1240	0.1091 0.1198 0.1197	0.1027 0.1141 0.1153	0.0963 0.1083 0.1110	0.0899 0.1026 0.1066	0.0849 0.0969 0.1023	0.0815 0.0911 0.0979	0.0780 0.0854 0.0936	0.0745 0.0796 0.0892	0.0711 0.0739 0.0849
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	40848 46432	39224	37602	35981	34359	32738	31116	29494	27873	26251	24630	23008	21387
	141004	44647 135657	42916 131210	41210 126965	39506 122906	37802 119020	36099 115293	34395 111714	32691 108198	30988 104690	29284 101183	27580 97675	25877 94167
v	111001	11185	16313	15603	14915	14265	13650	13067	12503	11943	11384	10825	10265
· · ·	228284	230713	228042	219759	211686	203825	196158	188670	181265	173873	166480	159088	151695
ري دي	43558 45281	41870 65643	40205 62876	38542 60494	36880 58200	35218 55986	33556 53847	31894 51776	30232 49770	28570 47791	26908 45815	25245 43839	23583 41863
	127317	123168	119204	115412	111778	108292	104932	101593	98255	94916	91577	88238	84899
	15527	14851	14196	13578	12993	12437	11900	11368	10835	10303	9771	9238	8706
	231683	245532	236481	228026	219851	211933	204235	196632	189092	181579	174070	166561	159052
	3,399	14,819	8,439	8,268	8,165	8,108	8,077	7,962	7,827	7,707	7,590	7,473	7,357
	4,253	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	- 0	0	0
	7,652	14,819	8,439	8,268	8,165	8,108	8,077	7,962	7,827	7,707	7,590	7,473	7,357
	-7,416	-101	3,751	7,239	10,424	13,349	16,042	18,497	20,728	22,759	24,609	26,292	27,824

	0.0676	0.0641	0.0607	0.0572									
	0.0692	0.0657	0.0621	0.0586									
	0.0816	0.0794	0.0772	0.0751	0.0729	0.0707	0.0685	0.0663	0.0641	0.0620	0.0598	0.0576	0.0554
	2031	2032	2033	2034	2025	2026	2027	2020	2020	2040	2044	00.40	2042
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
	19972	18867	17865	16863	74411	99884	95673	92049	88558	85190	81934	78784	75731
	24173	22469	20983	19822	18770	17717	78178	104941	100516	96709	93041	89502	86082
	90659	87151	83643	80136	76628	73120	69612	66687	64636	62876	61116	59356	57596
	9706	9147	8587	8028	7554	7209	6906	6604	6301	5999	5696	5394	5091
	144509	137634	131078	124849	177362	197930	250369	270281	260012	250774	241788	233036	224501
_													
S	21921	20471	19338	18312	17285	76271	102381	98065	94351	90772	87319	83983	80754
4	39888	37912	35936	33960	31985	30009	28033	26057	24334	22987	21767	20547	90662
	81561	78222	74883	71544	68205	64936	62498	60823	59148	57473	55798	54123	52448
	8173	7641	7190	6861	6574	6286	5998	5710	5422	5134	4846	21321	28786
	151543	144246	137348	130678	124049	177501	198911	190655	183254	176366	169730	179973	252649
	7,033	6,612	6,269	5,829	-53,313	-20,429	-51,459	-79,626	-76,758	-74,407	-72,058	-53,063	28,149
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	7,033	6,612	6,269	5,829	-53,313	-20,429	-51,459	-79,626	-76,758	-74,407	-72,058	-53,063	28,149
	29,179	30,356	31,388	32,275	24,773	22,116	15,926	7,071	-821	-7,894	-14,227	-18,539	-16,424

	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056
	•												
		•											
	72719	69713	66706	63700	60694	57687	54681	51675	48668	45662	42656	39649	37026
	82772	79565	76401	73242	70083	66925	63766	60608	57449	54291	51132	47974	44815
	55836	54076	52317	50557	48797	47037	45277	43517	41757	39997	38238	36478	34718
	22401	30243	28927	27651	26447	25307	24225	23179	22142	21105	20068	19031	17994
	233728	233597	224351	215150	206021	196956	187949	178979	170017	161055	152094	143132	134553
Ui	77624	74537	71456	68374	65293	62211	59130	56048	52967	49885	46804	43722	40641
-	121699	116568	112153	107900	103795	99829	95991	92270	88601	84938	81275	77612	73950
	50773	49098	47423	45748	44072	42397	40722	39047	37372	35697	34022	60784	370597
	27533	26319	25172	24087	23058	22062	21075	20088	19101	18114	17127	16140	15153
	277629	266522	256204	246109	236218	226500	216918	207454	198041	188635	179228	198259	500340
	43,901	32,925	31,853	30,959	30,197	29,543	28,968	28,475	28,024	27,579	27,134	55,127	365,787
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	. 0	0	0	0	0	0	0	0	0	0
	43,901	32,925	31,853	30,959	30,197	29,543	28,968	28,475	28,024	27,579	27,134	55,127	365,787
	-13.375	-11.260	-9.369	-7.670	-6.137	-4.751	-3,494	-2.352	-1.312	-367	493	2,109	12,021

0.0532

0.0511

0.0489

0.0467 0.0445 0.0423

#### **AFFIDAVIT**

)

STATE OF NORTH CAROLINA )

COUNTY OF WAKE

I hereby certify that on this <u>2A</u> day of May, 2005, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared SAMUEL S. WATERS, who is personally known to me, and he/she acknowledged before me that he/she provided the answers to interrogatory number(s) 22-23 from Staff's Third Set of Interrogatories to Progress Energy Florida, Inc. (Nos. 22 - 23) in Docket No. 041393-EI, and that the responses are true and correct based on his personal knowledge.

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this \_\_\_\_\_\_\_ day of \_\_\_\_\_\_\_, 2005.

NOTARY

\*\*\*

PUBLIC

COUNTY

MARKET COUNTY

Notary Public

State of North Carolina, at Large

My Commission Expires:

### Progress Energy Florida Ten-Year Site Plan

**April 2004** 

2004-2013

Submitted to: Florida Public Service Commission



#### **FUEL REQUIREMENTS AND ENERGY SOURCES**

PEF's two-year actual and ten-year projected nuclear, coal, oil, and gas requirements (by fuel units) are shown on Schedule 5. PEF's two-year actual and ten-year projected energy sources, in GWh and percent, are shown by fuel type on Schedules 6.1 and 6.2, respectively. PEF's fuel requirements and energy sources reflect a diverse fuel supply system that is not dependent on any one-fuel source. Natural gas consumption is projected to increase as plants are added to meet future load growth. PEF's coal, nuclear, and purchased power requirements are projected to remain relatively stable over the ten-year planning horizon.

#### SCHEDULE 5

#### FUEL REQUIREMENTS

(1)	(2)	(3)	(4)	(5)	( <del>6</del> )	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACT	UAL-										
	FUEL REQUIREM	ENTS	<u>UNITS</u>	2002	<u>2003</u>	2004	<u>2005</u>	<u>2006</u>	<u>2007</u>	2008	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
(1)	NUCLEAR		TRILLION BTU	69	62	69	63	68	63	69	52	68	63	69	63
(2)	COAL		1,000 TON	5,557	6,173	6,385	6,664	6,564	6,375	6,445	6,879	6,678	6,812	6,853	6,866
(3)	RESIDUAL	TOTAL	1,000 BBL	9,851	10,701	10,152	9,994	8,204	9,159	7,618	7,570	5,982	6,562	5,732	6,062
(4)		STEAM	1,000 BBL	9,851	10,701	10,152	9,994	8,204	9,159	7,618	7,570	5,982	6,562	5,732	6,062
(5)		CC	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(6)		CT	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(7)		DIESEL	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(8)	DISTILLATE	TOTAL	1,000 BBL	1,548	1,076	723	844	538	580	368	716	622	912	615	800
(9)		STEAM	1,000 BBL	108	119	35	30	39	34	36	47	145	143	178	154
(10)		CC	1,000 BBL	0	32	0	0	0	0	0	0	0	0	0	0
(11)		CT	1,000 BBL	1,440	925	688	814	499	546	332	669	477	769	437	646
(12)		DIESEL	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(13)	NATURAL GAS	TOTAL	1,000 MCF	55,916	52,180	55,222	59,474	75,156	85,571	95,041	109,803	131,853	148,327	154,830	165,725
(14)		STEAM	1,000 MCF	4,717	832	0	0	0	0	0	0	0	0	0	0
(15)		CC	1,000 MCF	35,526	36,370	41,571	44,642	63,386	70,917	83,107	94,606	119,643	133,758	144,069	153,471
(16)		CT	1,000 MCF	15,673	14,978	13,651	14,832	11,770	14,654	11,934	15,197	12,210	14,569	10,761	12,254
(17)	OTHER (SPECIFY)														
	SEASONAL PURCHASE	CT	1,000 BBL	N/A	N/A	0	12	0	0	0	0	0	0	0	0
	SEASONAL PURCHASE	CT	1,000 MCF	N/A	N/A	19	97	0	0	0	0	0	0	0	0

#### SCHEDULE 6.1

#### ENERGY SOURCES (GWh)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACT	UAL-										
	ENERGY SOURCES		<u>UNITS</u>	<u>2002</u>	2003	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	2008	<u>2009</u>	<u>2010</u>	2011	2012	2013
(1)	ANNUAL FIRM INTERCHANGE	1/	GWh	27	97	154	146	80	89	74	105	97	8	0	0
(2)	NUCLEAR		GWh	6,700	6,039	6,658	6,131	6,640	6,092	6,658	5,089	6,640	6,146	6,658	6,145
(3)	COAL		GWh	14,406	16,111	16,485	17,198	16,919	16,433	16,614	17,775	17,260	17,626	17,741	17,776
(4)	RESIDUAL	TOTAL	GWh	6,319	6,785	6,258	6,149	4,990	5,553	4,513	4,557	3,603	3,984	3 <u>,445</u>	3,664
(5)		STEAM	GWh	6,319	6,785	6,258	6,149	4,990	5,553	4,513	4,557	3,603	3,984	3,445	3,664
(6)		CC	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(7)		CT	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(8)		DIESEL	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(9)	DISTILLATE	TOTAL	GWh	607	405	286	336	206	260	160	318	231	363	219	316
(10)		STEAM	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(11)		CC	GWh	0	19	0	0	0	0	0	0	0	0	0	0
(12)		CT	GWh	607	386	286	336	206	260	160	318	231	363	219	316
(13)		DIESEL	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(14)	NATURAL GAS	TOTAL	GWh	6,446	6,155	7,020	7,589	10,101	11,558	13,054	15,018	18,362	20,645	21,821	23,314
(15)		STEAM	GWh	462	83	0	0	0	0	0	0	0	0	0	0
(16)		CC	GWh	4,816	4,938	5,881	6,355	9,101	10,244	11,959	13,671	17,256	19,350	20,832	22,216
(17)		CT	GWh	1,168	1,134	1,139	1,234	1,000	1,314	1,095	1,347	1,106	1,295	989	1,098
(18)	OTHER 2/														
	QF PURCHASES		GWh	5,091	5,022	4,677	4,587	4,589	4,463	4,362	3,673	3,584	3,584	3,594	3,393
	IMPORT FROM OUT OF STATE	;	GWh	3,317	3,555	3,623	3,609	3,595	3,596	3,612	3,612	1,486	0	0	0
	EXPORT TO OUT OF STATE		GWh	-346	-258	0	0	0	0	0	0	0	0	0	0
(19)	NET ENERGY FOR LOAD		GWh	42,567	43,911	45,161	45,745	47,120	48,044	49,047	50,147	51,263	52,356	53,478	54,608

 $<sup>1/\,</sup>$  NET ENERGY PURCHASED (+) OR SOLD (-) WITHIN THE FRCC REGION.

<sup>2/</sup> NET ENERGY PURCHASED (+) OR SOLD (-).

#### SCHEDULE 6.2

#### ENERGY SOURCES (PERCENT)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACTU	AL-										
	<b>ENERGY SOURCES</b>		<u>UNITS</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	2008	2009	<u> 2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
(1)	ANNUAL FIRM INTERCHANGE 1/		%	0.1%	0.2%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.0%	0.0%	0.0%
(2)	NUCLEAR		%	15.7%	13.8%	14.7%	13.4%	14.1%	12.7%	13.6%	10.1%	13.0%	11.7%	12.4%	11.3%
(3)	COAL		%	33.8%	36.7%	36.5%	37.6%	35.9%	34.2%	33.9%	35.4%	33.7%	33.7%	33.2%	32.6%
(4)	RESIDUAL	TOTAL	%	14.8%	15.5%	13.9%	13.4%	10.6%	11.6%	9.2%	9.1%	7.0%	7.6%	6.4%	6.7%
(5)		STEAM	%	14.8%	15.5%	13.9%	13.4%	10.6%	11.6%	9.2%	9.1%	7.0%	7.6%	6.4%	6.7%
(6)		CC	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(7)		CT	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(8)		DIESEL	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(9)	DISTILLATE	TOTAL	%	1.4%	0.9%	0.6%	0.7%	0.4%	0.5%	0.3%	0.6%	0.5%	0.7%	0.4%	0.6%
(10)		STEAM	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(11)		CC	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(12)		CT	%	1.4%	0.9%	0.6%	0.7%	0.4%	0.5%	0.3%	0.6%	0.5%	0.7%	0.4%	0.6%
(13)		DIESEL	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(14)	NATURAL GAS	TOTAL	%	15.1%	14.0%	15.5%	16.6%	21.4%	24.1%	26.6%	29.9%	35.8%	39.4%	40.8%	42.7%
(15)		STEAM		1.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(16)		СС	%	11.3%	11.2%	13.0%	13.9%	19.3%	21.3%	24.4%	27.3%	33.7%	37.0%	39.0%	40.7%
(17)		CT	%	2.7%	2.6%	2.5%	2.7%	2.1%	2.7%	2.2%	2.7%	2.2%	2.5%	1.8%	2.0%
(18)	OTHER 2/														
. ,	QF PURCHASES		%	12.0%	11.4%	10.4%	10.0%	9.7%	9.3%	8.9%	7.3%	7.0%	6.8%	6.7%	6.2%
	IMPORT FROM OUT OF STATE		%	7.8%	8.1%	8.0%	7.9%	7.6%	7.5%	7.4%	7.2%	2.9%	0.0%	0.0%	0.0%
	EXPORT TO OUT OF STATE		%	-0.8%	-0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(19)	NET ENERGY FOR LOAD		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

 $<sup>1/\,</sup>$  NET ENERGY PURCHASED (+) OR SOLD (-) WITHIN THE FRCC REGION.

<sup>2/</sup> NET ENERGY PURCHASED (+) OR SOLD (-).

# SCHEDULE 7.1 FORECAST OF CAPACITY, DEMAND AND SCHEDULED MAINTENANCE AT TIME OF SUMMER PEAK

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TOTAL	FIRM	FIRM		TOTAL	SYSTEM FIRM					
	INSTALLED	CAPACITY	CAPACITY		CAPACITY	SUMMER PEAK	RESERVE MARGIN		SCHEDULED	RESERV	Æ MARGIN
	CAPACITY	IMPORT	EXPORT	QF	AVAILABLE	DEMAND	BEFORE	MAINTENANCE	MAINTENANCE	AFTER M.	AINTENANCE
YEAR	MW	MW	MW	MW	MW	MW	MW	% OF PEAK	MW	MW	% OF PEAK
2004	8,332	474	0	833	9,639	7,997	1,642	21%	0	1,642	21%
2005	8,332	642	* 0	820	9,794	8,117	1,677	21%	0	1,677	21%
2006	8,848	642	* 0	820	10,310	8,519	1,791	21%	0	1,791	21%
2007	9,322	484	0	802	10,608	8,758	1,850	21%	0	1,850	21%
2008	9,783	484	0	787	11,054	8,954	2,100	23%	0	2,100	23%
2009	9,783	484	0	647	10,914	9,110	1,804	20%	0	1,804	20%
2010 **	10,739	70	0	647	11,456	9,330	2,126	23%	0	2,126	23%
2011	10,739	0	0	647	11,386	9,486	1,900	20%	0	1,900	20%
2012	11,217	0	0	647	11,864	9,634	2,230	23%	0	2,230	23% .
2013	11,217	0	0	537	11,754	9,811	1,943	20%	0	1,943	20%

<sup>\*</sup> Progress Energy is currently negotiating a firm purchase of approximately 158 MW which is expected to run from the summer of 2005 through the winter of 2006/2007. The deal is not yet consummated as of the time of the Ten-Year Site Plan filing. Since the purchase is expected to be from peaking capacity, no energy impact has been included in the plan at this time.

<sup>\*\*</sup> Progress Energy currently has a contract with the Southern Companies to purchase approximately 400 MW of firm capacity through May, 2010. The expansion plan currently shows the addition of a combined-cycle unit, to be placed in service in May, 2010, as a placeholder for extension of the contract. Discussions are currently underway to extend the contract, and it is expected that agreement will be reached either with the Southern Companies, or another supplier, which will continue the import of this firm capacity and energy across the Florida-Georgia interface well beyond the planning period presented. While the exact terms of the contract extension/replacement are not known at this time, the combined-cycle unit placed in service in 2010 is a reasonable match to the capacity and energy expected to be obtained in either a contract extension or agreement with another supplier.

AT TIME OF WINTER PEAK

### SCHEDULE 7.2 FORECAST OF CAPACITY, DEMAND AND SCHEDULED MAINTENANCE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TOTAL	FIRM	FIRM		TOTAL	SYSTEM FIRM					
	INSTALLED	CAPACITY	CAPACITY		CAPACITY	WINTER PEAK	WINTER PEAK RESERVE MARGI		SCHEDULED	RESERV	E MARGIN
	CAPACITY	IMPORT EXPOR		QF	AVAILABLE	DEMAND	BEFORE MAINTENANCE		MAINTENANCE	AFTER MA	AINTENANCE
YEAR	MW	MW	MW	MW	MW	MW	MW	% OF PEAK	MW	MW	% OF PEAK
2003 / 04	9,174	494	1	833	10,501	8,626	1,875	22%	0	1,875	22%
2004 / 05	9,174	672	• 0	820	10,666	8,903	1,763	20%	0	1,763	20%
2005 / 06	9,756	642	** 0	820	11,218	9,153	2,065	23%	0	2,065	23%
2006 / 07	10,320	642	** 0	802	11,764	9,595	2,169	23%	0	2,169	23%
	10,837	484	0	787	12,108	9,737	2,371	24%	0	2,371	24%
2008 / 09	10,837	484	0	678	11,999	9,891	2,108	21%	0	2,108	21%
2009 / 10	11,373	484	0	647	12,504	10,114	2,390	24%	0	2,390	24%
2010 / 11 **	* 11,909	70	0	647	12,626	10,275	2,351	23%	0	2,351	23%
2011 / 12	11,909	0	0	647	12,556	10,427	2,129	20%	0	2,129	20%
2012 / 13	12,445	0	0	647	13,092	10,606	2,486	23%	0	2,486	23%

- Includes Seasonal Purchase of 20 MW in 2003/04 and 188 MW in 2004/05.
- \*\* Progress Energy is currently negotiating a firm purchase of approximately 158 MW which is expected to run from the summer of 2005 through the winter of 2006/2007. The deal is not yet consummated as of the time of the Ten-Year Site Plan filing. Since the purchase is expected to be from peaking capacity, no energy impact has been included in the plan at this time.
- \*\*\* Progress Energy currently has a contract with the Southern Companies to purchase approximately 400 MW of firm capacity through May, 2010. The expansion plan currently shows the addition of a combined-cycle unit, to be placed in service in May, 2010, as a placeholder for extension of the contract. Discussions are currently underway to extend the contract, and it is expected that agreement will be reached either with the Southern Companies, or another supplier, which will continue the import of this firm capacity and energy across the Florida-Georgia interface well beyond the planning period presented. While the exact terms of the contract extension/replacement are not known at this time, the combined-cycle unit placed in service in 2010 is a reasonable match to the capacity and energy expected to be obtained in either a contract extension or agreement with another supplier.

### SCHEDULE 8 PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES

#### AS OF JANUARY 1, 2004 THROUGH DECEMBER 31, 2013

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
								CONST.	COM'L IN-	EXPECTED	GEN. MAX.	NET CAPA	BILITY		
	UNIT	LOCATION	UNIT	FU	EL	FUEL TR	ANSPORT	START	SERVICE	RETIREMENT	NAMEPLATE	SUMMER Y	VINTE	t	
PLANT NAME	NO.	(COUNTY)	TYPE	PRI.	ALT.	PRI.	ALT.	MO. / YR	MO. / YR	MO. / YR	<u>KW</u>	<u>MW</u>	<u>ww</u>	STATUS	NOTES
HINES ENERGY COMPLEX	3	POLK	cc	NG	DFO	PL	TK	9/2003	12/2005			516	582	υ	
PEAKER	1	UNKNOWN	GT	NG	DFO	PL	UN	12/2005	12/2006			158	188	P	
PEAKER	2	UNKNOWN	GT	NG	DFO	PL	UN	12/2005	12/2006			158	188	P	
PEAKER	3	UNKNOWN	GT	NG	DFO	PL	UN	12/2005	12/2006			. 158	188	P	
HINES ENERGY COMPLEX	4	POLK	CC	NG	DFO	PL	TK	9/2005	12/2007			461	517	P	
HINES ENERGY COMPLEX	5	POLK	CC	NG	DFO	PL	TK	9/2007	12/2009			478	536	P	
HINES ENERGY COMPLEX	6	POLK	CC	NG	DFO	PL	TK	2/2008	5/2010			478	536	P	
COMBINED-CYCLE	ì	UNKNOWN	CC	NG	DFO	PL	UN	2/2010	5/2012			478	536	P	
COMBINED-CYCLE	2	UNKNOWN	CC	NG	DFO	PL	UN	9/2011	12/2013			478	536	P	

### Progress Energy Florida Ten-Year Site Plan

**April 2005** 

2005-2014

**Submitted to:** Florida Public Service Commission



#### FUEL REQUIREMENTS AND ENERGY SOURCES

PEF's two-year actual and ten-year projected nuclear, coal, oil, and gas requirements (by fuel units) are shown on Schedule 5. PEF's two-year actual and ten-year projected energy sources, in GWh and percent, are shown by fuel type on Schedules 6.1 and 6.2, respectively. PEF's fuel requirements and energy sources reflect a diverse fuel supply system that is not dependent on any one-fuel source. Natural gas consumption is projected to increase as plants and purchases with tolling agreements are added to meet future load growth. PEF's coal and nuclear generation is projected to remain relatively stable over the ten-year planning horizon.

### SCHEDULE 5 FUEL REQUIREMENTS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16
				-ACT	UAL-										
	FUEL REQUIREM	<u>IENTS</u>	<u>UNITS</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	2009	2010	<u>2011</u>	<u>2012</u>	<u>2013</u>	2014
(1)	NUCLEAR		TRILLION BTU	62	69	63	68	63	69	52	68	63	69	63	68
(2)	COAL		1,000 TON	6,173	5,915	6,057	5,729	5,889	5,714	6,006	6,017	5,975	5,816	5,926	5,89
(3)	RESIDUAL	TOTAL	1,000 BBL	10,701	10,864	11,446	8,989	12,026	9,860	10,469	10,942	10,462	9,177	9,761	8,67:
(4)		STEAM	1,000 BBL	10,701	10,864	11,446	8,989	12,026	9,860	10,469	10,942	10,462	9,177	9,761	8,67:
(5)		CC	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(6)		CT	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(7)		DIESEL	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(8)	DISTILLATE	TOTAL	1,000 BBL	1,076	1,019	686	338	677	281	458	457	343	302	364	396
(9)		STEAM	1,000 BBL	119	152	24	33	26	33	29	25	30	39	37	37
(10)	ratio	CC	1,000 BBL	32	2	0	0	0	0	0	0	0	0	0	0
(11)		CT	1,000 BBL	925	865	662	305	651	248	429	432	313	263	327	359
(12)		DIESEL	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(12)	NATURAL GAS	TOTAL	1 000 MCF		62 674	72 574	04.054	26.014	07.740	107.511	115.000	120 461	155 701	164.053	102.01
(13)	NATURAL GAS	STEAM	,	52,180 832	62,674 1.071	73,574	84,254	76,014 0	97,740 0	0	115,288	0	0	0	0
(15)		CC	1,000 MCF	36.370	45,816	54,459	72,237	65,640	89,075	96,852		•		156,603	
(16)		СТ	1,000 MCF	14.978	15,787	19,115	12,016	10,374	8,665	10.659	8,433	7,702	6,800	8,249	8,355
(10)		Ci	1,000 MC1	14,570	13,767	19,113	12,010	10,574	6,005	10,039	0,733	1,102	0,800	0,249	0,550
(17)	OTHER (SPECIFY	)													
	SEASONAL PURCHAS	E CT	1,000 BBL	N/A	N/A	0	0	19	0	2	0	0	0	0	0
	SEASONAL PURCHAS	e <b>C</b> C	1,000 MCF	N/A	N/A	0	0	. 0	0	0	5,038	6,875	7,065	7.510	6,647
	SEASONAL PURCHAS	E CT	1,000 MCF	N/A	N/A	4,852	1,978	6,893	5,171	6,681	5,372	4,865	4,350	5,253	489

#### SCHEDULE 6.1

#### ENERGY SOURCES (GWh)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACT	J <b>AL</b> -										
	ENERGY SOURCES		<u>UNITS</u>	<u>2003</u>	2004	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	2014
(1)	ANNUAL FIRM INTERCHANGE 1/		GWh	97	417	922	1,501	2,018	1,791	1,980	1,878	1,496	1,407	1,493	1,018
(2)	NUCLEAR		GWh	6,039	6,703	6,069	6,636	6,089	6,655	5,087	6,636	6,143	6,655	6,143	6,636
															4-
(3)	COAL		GWh	16,111	15,063	15,723	14,797	15,267	14,753	15,550	15,595	15,501	15,035	15,369	15,260
(4)	RESIDUAL	TOTAL	GWh	6,785	6,981	7,044	5,387	7,458	5,940	6,358	6,657	6,329	5,447	5,841	5,065
(5)		STEAM	GWh	6,785	6,981	7,044	5,387	7,458	5,940	6,358	6,657	6,329	5,447	5,841	5,065
(6)		CC	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(7)		CT	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(8)		DIESEL	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(9)	DISTILLATE	TOTAL	GWh	405	361	274	125	269	102	177	179	128	108	134	146
(10)		STEAM	GWh	0	0	Ő	0	0	0	0	0	0	0	0	0
(11)		CC	GWh	19	2	0	0	0	0	0	0	0	0	0	0
(12)		CT	GWh	386	359	274	125	269	102	177	179	128	108	134	146
(13)		DIESEL	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(14)		TOTAL		6,155			11,220								
(15)		STEAM		83	106	0	0	0	0	0	0	0	0	0	0
(16)		CC	GWh	4,938	6,227		10,230				•				26,250
(17)		CT	GWh	1,134	1,183	1,525	989	869	740	893	721	669	599	704	709
(18)	OTHER 2/														
	QF PURCHASES		GWh	5,022	4,685	4,727	4,718	4,595	4,485	4,470	4,466	4,463	4,463	4,250	3,042
	IMPORT FROM OUT OF STATE		GWh	3,555	3,862	3,583	3,517	3,545	3,488	3,408	2,293	1,439	1,451	1,515	1,394
	EXPORT TO OUT OF STATE		GWh	-258	-320	0	0	0	0	0	0	0	0	0	0
(19)	NET ENERGY FOR LOAD		GWh	43,911	45,268	47,630	47,900	49,372	50,567	51,648	53,541	54,882	56,263	57,676	59,520

<sup>1/</sup> NET ENERGY PURCHASED (+) OR SOLD (-) WITHIN THE FRCC REGION.

<sup>2/</sup> NET ENERGY PURCHASED (+) OR SOLD (-).

## SCHEDULE 6.2 ENERGY SOURCES (PERCENT)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACT	JAL-										
	ENERGY SOURCES		<u>UNITS</u>	<u>2003</u>	<u>2004</u>	2005	2006	<u>2007</u>	2008	2009	<u>2010</u>	<u>2011</u>	<u>2012</u>	2013	2014
(1)	ANNUAL FIRM INTERCHANGE 1/	,	%	0.2%	0.9%	1.9%	3.1%	4.1%	3.5%	3.8%	3.5%	2.7%	2.5%	2.6%	1.7%
(2)	NUCLEAR		%	13.8%	14.8%	12.7%	13.9%	12.3%	13.2%	9.8%	12.4%	11.2%	11.8%	10.7%	11.1%
(3)	COAL		%	36.7%	33.3%	33.0%	30.9%	30.9%	29.2%	30.1%	29.1%	28.2%	26.7%	26.6%	25.6%
(4)	RESIDUAL	TOTAL	%	15.5%	15.4%	14.8%	11.2%	15.1%	11.7%	12.3%	12.4%	11.5%	9.7%	10.1%	8.5%
(5)		STEAM	%	15.5%	15.4%	14.8%	11.2%	15.1%	11.7%	12.3%	12.4%	11.5%	9.7%	10.1%	8.5%
(6)		CC	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(7)		CT	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(8)	,	DIESEL	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(9)	DISTILLATE	TOTAL	%	0.9%	0.8%	0.6%	0.3%	0.5%	0.2%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%
(10)		STEAM	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(11)		CC	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(12)		CT	%	0.9%	0.8%	0.6%	0.3%	0.5%	0.2%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%
(13)		DIESEL	. %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(14)	NATURAL GAS	TOTAL	%	14.0%	16.6%	19.5%	23.4%	20.5%	26.4%	28.3%	29.6%	35.3%	38.6%	39.8%	45.3%
(15)		STEAM	%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(16)		CC	%	11.2%	13.8%	16.3%	21.4%	18.8%	24.9%	26.6%	28.2%	34.1%	37.5%	38.5%	44.1%
(17)		CT	%	2.6%	2.6%	3.2%	2.1%	1.8%	1.5%	1.7%	1.3%	1.2%	1.1%	1.2%	1.2%
(18)	OTHER 2/														
/	QF PURCHASES		%	11.4%	10.3%	9.9%	9.8%	9.3%	8.9%	8.7%	8.3%	8.1%	7.9%	7.4%	5.1%
	IMPORT FROM OUT OF STATE		%	8.1%	8.5%	7.5%	7.3%	7.2%	6.9%	6.6%	4.3%	2.6%	2.6%	2.6%	2.3%
	EXPORT TO OUT OF STATE		%	-0.6%	-0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
			,-	2.0.0				• /•		• •	,		<del>.</del>		
(19)	NET ENERGY FOR LOAD		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

<sup>1/</sup> NET ENERGY PURCHASED (+) OR SOLD (-) WITHIN THE FRCC REGION.

<sup>2/</sup> NET ENERGY PURCHASED (+) OR SOLD (-).

### **CHAPTER 3**

## FORECAST OF FACILITIES REQUIREMENTS

### RESOURCE PLANNING FORECAST

### **OVERVIEW OF CURRENT FORECAST**

### Supply-Side Resources

PEF has a summer total capacity resource of 9,769 MW, as shown in Table 3.1. This capacity resource includes utility purchased power (474 MW), non-utility purchased power (820 MW), combustion turbine (2,619 MW, 143 MW of which is owned by Georgia Power for the months June through September), nuclear (769 MW), fossil steam (3,882 MW) and combined-cycle plants (1,205 MW). Table 3.2 shows PEF's contracts for firm capacity provided by Qualifying Facilities (QFs).

### Demand-Side Programs

Total DSM resources are shown in Schedules 3.1.1 and 3.2.1 of Chapter 2. These programs include Non-Dispatchable DSM, Interruptible Load, and Dispatchable Load Control resources. PEF's 2005 Ten-Year Site Plan Demand-Side Management projections are consistent with the DSM Goals established by the Commission in Docket No. 040031-EG.

#### Capacity and Demand Forecast

PEF's forecasts of capacity and demand for the projected summer and winter peaks are shown in Schedules 7.1 and 7.2, respectively. PEF's forecasts of capacity and demand are based on serving expected growth in retail requirements in its regulated service area and meeting commitments to wholesale power customers who have entered into supply contracts with PEF. In its planning process, PEF balances its supply plan for the needs of retail and wholesale customers and endeavors to ensure that cost-effective resources are available to meet the needs across the customer base. Over the years, as wholesale markets have grown more competitive, PEF has remained active in the competitive solicitations while planning in a manner that maintains an appropriate balance of commitments and resources within the overall regulated supply framework.

### Base Expansion Plan

PEF's planned supply resource additions and changes are shown in Schedule 8 and are referred to as PEF's Base Expansion Plan. This Plan includes 3,357 MW (summer rating) of proposed new capacity additions through the summer of 2014. As identified in Schedule 8, PEF's next planned need is the Hines 3 Unit, a 516 MW (summer) power block with a December 2005 in-service date. PEF's self-build option for Hines Unit 3 was determined to be the most cost-effective alternative (FPSC Docket No. 020953-EI, Order No. PSC-03-0175-FOF-EI, issued February 4, 2003). After Hines 3, the next planned unit is Hines 4, 461 MW (summer) power block with a December 2007 in-service date. Hines Unit 4 was granted its Need Certificate by the FPSC in November 2004 (Docket No. 040817-EI, Order No. PSC-04-1168-FOF-EI).

PEF's Base Expansion Plan projects requirements for additional combined-cycle units with proposed in-service dates of 2009, 2010, 2012, 2013 and 2014. These high efficiency gas-fired combined-cycle units, together with the Central Power & Lime Purchase from December 2005 through December 2015, the Shady Hills Purchase from December 2006 through April 2014, and the Southern Company Purchase from June 2010 through December 2015 help the PEF system meet the growing energy requirements of its customer base and also contribute to meeting the requirements of the 1990 Clean Air Act Amendments. Fuel switching, SO<sub>2</sub> emission allowance purchases, re-dispatching of system generation and technology improvements are additional options available to PEF to ensure compliance with these important environmental requirements. Status reports and specifications for new generation facilities are included in Schedule 9. As shown in Schedule 10, there are no new transmission lines associated with the Hines 3 combined-cycle unit, and only one new line (Hines-West Lake Wales 230 kV) required for the Hines 4 combined-cycle unit.

Current planning studies identify gas-fired units as the most economic alternatives for system expansion over the ten-year planning term. New coal units may become a competitive option beyond the ten-year timeframe should forecasted gas prices continue to increase versus coal over that term. The uncertainties associated with fuel price forecasts and the long lead times required to site, permit, license, engineer, and construct a coal unit will require additional study of coal options in the next planning cycle.

The recently issued Clean Air Interstate Rule (CAIR) may impact PEF's need for new capacity. While a compliance plan has not yet been finalized, some alternatives may impact the capacity of existing and/or future generation resources, resulting in a need for additional capacity. Once the compliance plan has been finalized, PEF will quantify the impacts on generating resources and determine if any additional capacity is needed.

**TABLE 3.1** 

# TOTAL CAPACITY RESOURCES OF POWER PLANTS AND PURCHASED POWER CONTRACTS

# AS OF DECEMBER 31, 2004

PLANTS	NUMBER OF UNITS	SUMMER NET DEPENDABI CAPABILITY (MW)	LE .
Nuclear Steam			
Crystal River	<u>1</u> 1	<u>769</u>	(I)
Total Nuclear Steam	1	769	
Fossil Steam			
Crystal River	4	2,302	
Anclote	2	993	
Paul L. Bartow	3	444	
Suwannee River	<u>3</u>	<u>143</u>	
Total Fossil Steam	12	3,882	
Combined-cycle			•
Hines Energy Complex	2	998	
Tiger Bay		<u>207</u>	
Total Combined-cycle	$\frac{1}{3}$	1,205	
Combustion Turbine			
DeBary	10	667	
Intercession City	14	1,041	(2)
Bayboro	4	184	(-)
Bartow	4	187	
Suwannee	3	164	
Turner	4	154	
Higgins	4	122	
Avon Park	2	52	
University of Florida	$\frac{\overline{1}}{1}$	35	
Rio Pinar	<u>1</u>	13	
Total Combustion Turbine	$4\overline{7}$	2,619	
Total Units Total Net Generating Capability	63	0.485	
		8,475	
<ul><li>(1) Adjusted for sale of approximately 8.</li><li>(2) Includes 143 MW owned by Georgia</li></ul>	2% of total capacity Power Company (Jun-Sep)		
Purchased Power			
Qualifying Facility Contracts	19	820	
Investor Owned Utilities	2	474	
TOTAL CAPACITY RESOURCES		9,769	

SCHEDULE 7.1

FORECAST OF CAPACITY, DEMAND AND SCHEDULED MAINTENANCE
AT TIME OF SUMMER PEAK

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TOTAL	FIRM	FIRM		TOTAL	SYSTEM FIRM					
	INSTALLED	CAPACITY	CAPACITY		CAPACITY	SUMMER PEAK	RESER	VE MARGIN	SCHEDULED	RESERV	'E MARGIN
	CAPACITY	IMPORT	EXPORT	QF	AVAILABLE	DEMAND	BEFORE	MAINTENANCE	MAINTENANCE	AFTER MA	AINTENANCE
YEAR	MW	MW	MW	MW	MW	MW	MW	% OF PEAK	MW	MW	% OF PEAK
2005	8,332	799	* 0	820	9,951	8,173	1,778	22%	0	1,778	22%
2006	8,848	767	* 0	820	10,435	8,663	1,772	20%	0	1,772	20%
2007	8,848	1,087	0	802	10,737	8,958	1,779	20%	0	1,779	20%
2008	9,309	1,087	0	787	11,183	9,187	1,996	22%	0	1,996	22%
2009	9,309	1,087	0	787	11,183	9,353	1,830	20%	0	1,830	20%
2010	9,785	1,098	0 .	787	11,670	9,719	1,951	20%	0	1,951	20%
2011	10,261	1,028	0	787	12,076	9,926	2,150	22%	0	2,150	22%
2012	10,737	1,028	0	<b>7</b> 87	12,552	10,138	2,414	24%	0	2,414	24%
2013	10,737	1,028	0	677	12,442	10,355	2,087	20%	0	2,087	20%
2014	11,689	550	0	490	12,729	10,567	2,162	20%	0	2,162	20%

<sup>\*</sup> Progress Energy is pursuing seasonal purchases of approximately 300 MW in 2005 and 150 MW in 2006. The deals are not yet consummated as of the time of the Ten-Year Site Plan filling. Since the purchase is expected to be from peaking capacity, no energy impact has been included in the plan at this time.

The recently issued Clean Air Interstate Rule (CAIR) may impact PEF's need for new capacity. While a compliance plan has not yet been finalized, some alternatives may impact the capacity of existing and/or future generation resources, resulting in a need for additional capacity. Once the compliance plan has been finalized, PEF will quantify the impacts on generating resources and determine if any additional capacity is needed.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TOTAL	FIRM	FIRM		TOTAL	SYSTEM FIRM					
	INSTALLED	CAPACITY	CAPACITY		CAPACITY	WINTER PEAK	RESERVE	MARGIN	SCHEDULED	RESERV	E MARGIN
	CAPACITY	IMPORT	EXPORT	QF	AVAILABLE	DEMAND	BEFORE MA	INTENANCE	MAINTENANCE	AFTER M.	AINTENANC
YEAR	MW	MW	MW	MW	MW	MW	MW	% OF PEAK	MW	MW	% OF PEA
2004 / 05	9,174	672	* 0	820	10,666	8,914	1,752	20%	0	1,752	20%
2005 / 06	9,756	767	0	820	11,343	9,201	2,142	23%	0	2,142	23%
2006 / 07	9,756	1,287	0	802	11,844	9,704	2,140	22%	0	2,140	22%
2007 / 08	10,273	1,129	0	787	12,188	9,916	2,272	23%	0	2,272	23%
2008 / 09	10,273	1,129	0	787	12,188	10,133	2,055	20%	0	2,055	20%
2009 / 10	10,821	1,129	0	787	12,736	10,514	2,222	21%	0	2,222	21%
2010 / 11	11,369	1,140	0	787	13,295	10,741	2,554	24%	0	2,554	24%
2011 / 12	11,369	1,070	0	787	13,225	10,963	2,262	21%	0	2,262	21%
2012 / 13	11,917	1,070	0	787	13,773	11,189	2,584	23%	0	2,584	23%
2013 / 14	12,465	1,070	0	502	14,037	11,411	2,626	23%	0	2,626	23%

<sup>\*</sup> Includes Seasonal Purchase of 188 MW in 2004/05.

The recently issued Clean Air Interstate Rule (CAIR) may impact PEF's need for new capacity. While a compliance plan has not yet been finalized, some alternatives may impact the capacity of existing and/or future generation resources, resulting in a need for additional capacity. Once the compliance plan has been finalized, PEF will quantify the impacts on generating resources and determine if any additional capacity is needed.

# SCHEDULE 8 PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES

### AS OF JANUARY 1, 2004 THROUGH DECEMBER 31, 2014

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
								CONST.	COM'L IN-	EXPECTED	GEN. MAX.	NET CAPA	BILITY		
	UNIT	LOCATION	UNIT	<u>FU</u>	Œ <u>L</u>	FUEL TR	ANSPORT	START	SERVICE	RETIREMENT	NAMEPLATE	SUMMER	WINTER		
PLANT NAME	<u>NO.</u>	(COUNTY)	TYPE	<u>PRI.</u>	ALT.	PRI.	ALT.	MO. / YR	MO. / YR	MO. / YR	<u>KW</u>	<u>MW</u>	<u>MW</u>	STATUS	NOTES
HINES ENERGY COMPLEX	3	POLK	CC	NG	DFO	PL	TK	9/2003	12/2005			516	582	v	
HINES ENERGY COMPLEX	4	POLK	CC	NG	DFO	PL	TK	12/2005	12/2007			461	517	Т	
HINES ENERGY COMPLEX	5	POLK	CC	NG	DFO	PL	TK	5/2007	12/2009			476	548	P	
HINES ENERGY COMPLEX	6	POLK	CC	NG	DFO	PL	TK	5/2008	12/2010			476	548	P	
COMBINED-CYCLE	1	UNKNOWN	CC	NG	DFO	PL	UN	10/2009	5/2012			476	548	P	
COMBINED-CYCLE	2	UNKNOWN	CC	NG	DFO	PL	UN	5/2011	12/2013			476	548	P	
COMBINED-CYCLE	3	UNKNOWN	CC_	NG	DFO	PL_	UN	10/2011	5/2014			476	548	P	

( ) Motion									
( ) Order ( ) NOI									
Inc.									
DESCRIPTION  Progress (Perko) - (CONFIDENTIAL) Response to staff's 3rd set of interrogatories (No. 22). [CCA note: Document is part of Composite Hearing Exhibit No. 3 (DN 95382-05)]									

PLORIDA <b>Public Bernice Cremme</b> rio	H
DOCKET 04/393-E-I SYMPIT AND	3
DOCKET NO. 04/393-EI EXHIBIT NO. COMPANY/ FPSC Stabbooks WITHESS: Composite Confu	Stip-3
DATE: 06-02-05	

Confidential Version of the Direct Testimony of Samuel S. Waters

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SSW-1

(Confidential) Contract for the Purchase of Capacity and Energy between Southern Company Services, Inc., and Florida Power Corporation d/b/a Progress Energy Florida, Inc. from Plant Scherer Unit No. 3

DOCKET NO. 0413	93 <b>-</b> EI	EXH	MBIT MD	5	_
COMPANY/ WITHESS:	PEF Dir Samuel 06/02	ect/Si S Wa /05	uppleme ters (	ental D SSW-	irect

SSW-2

(Confidential) Contract for the Purchase of Capacity and Energy between Southern Company Services, Inc., and Florida Power Corporation d/b/a Progress Energy Florida, Inc. from Plant Franklin Unit No. 1

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COMPANY WITNESS:	PEF D	irect/	Supple	mental	Direct
WITNESS:	Samue 06/0	32/05	Wale		

SSW-3

(Confidential) Summary of Costs and Benefits of Units Power Sales Agreement with Southern Company.

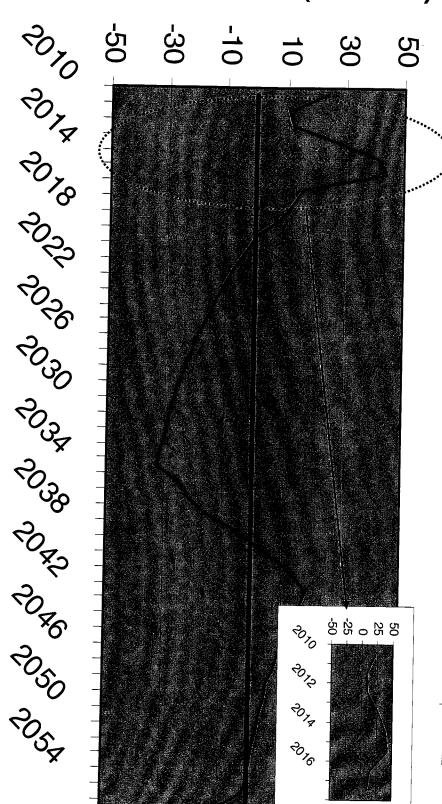
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COMPANY/ P.	EF Direct/	Supplemer	ntal Direct
WITNESS:	06/02/05	Value in the same of the same	

Docket No. 041393-EI Witness: Samuel S. Waters.

Exhibit No. \_\_\_\_ (SSW-4R)
Savings of UPS Contracts

# CPVRR, 2010\$ (millions)

With Economy Purchase Savings Savings of UPS Contracts



DOCUMENT NUMBER DATE

FPSC-COMMISSION CLERK

Progress Energy

PLORIDA PUBLIC SERVICE COMMISSION

DOCKET

NO. 04/393-EI EXHIBIT NO

COMPANY/PEF DIRECT SUPPREMENTAT DIRE
WITNESS: Samuel S. Waters (SSW) 4R

Confidential Version of the Direct Testimony of Maurice E. Brubaker

HOREDA PA	OLIC SERVIC	E-COMMI	BEION	
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COMPANY/	93-EI White S Brubake	prings r Conf	Mauri Direct	ce E. Testimony
DATE -	06/02/05	1		

Docket No. 041393-EI Witness: Maurice Brubaker Exhibit No. MEB-1 ( ) **Estimate of Differential Revenue Requirements** 

## **REDACTED VERSION**

### **BEFORE THE** PUBLIC SERVICE COMMISSION OF FLORIDA

In re: 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.

Docket No. 041393-El

Exhibit No. MEB-1 ( ) **ESTIMATE OF DIFFERENTIAL REVENUE REQUIREMENTS** WITH AND WITHOUT PROPOSED UPS AGREEMENTS BASED ON FPC EXPANSION PLAN ASSUMPTIONS

On behalf of

White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate ~ White Springs

> Project 8400 May 13, 2005



Brubaker & Associates, Inc.

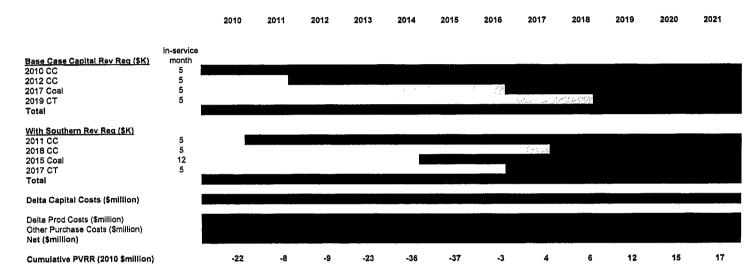
St. Louis, MO 63141-2000

FLORIDA PUBLIC SERVICE COMMISSION DOCKET

## Estimate of Differential Revenue Requirements With and Without Proposed UPS Agreements Based on PEF Expansion Plan Assumptions

Discount rate Escalation rate 8.16% 2.50%

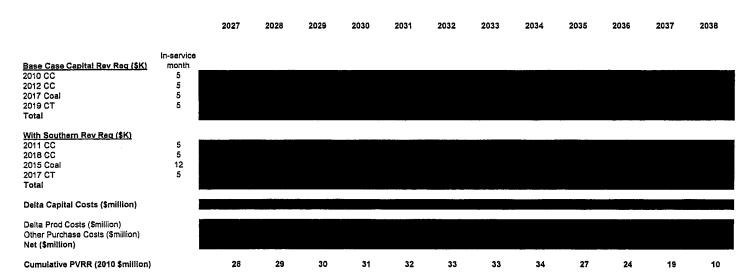
%



File: MEB Exhibits 12\_REDACTED.xls, Sheet: Exhibit 1

## Estimate of Differential Revenue Requirements With and Without Proposed UPS Agreements Based on PEF Expansion Plan Assumptions

Discount rate 8.16% Escalation rate 2.50%



## Estimate of Differential Revenue Requirements With and Without Proposed UPS Agreements Based on PEF Expansion Plan Assumptions

-2

-1

0

1

2

Discount rate 8.16% Escalation rate 2.50%

2053 2044 2045 2046 2047 2048 2049 2050 2051 2052 In-service Base Case Capital Rev Reg (\$K) 2010 CC month 5 2012 CC 5 5 5 2017 Coal 2019 CT Total With Southern Rev Reg (\$K) 2011 CC 2018 CC 5 5 12 5 2015 Coal 2017 CT Total Delta Capital Costs (\$million) Delta Prod Costs (\$million) Other Purchase Costs (\$million)

-10

Net (\$million)

Cumulative PVRR (2010 \$million)

Docket No. 041393-EI Witness: Maurice Brubaker Exhibit No. MEB-2() Estimate of Differential Revenue Requirements

# BEFORE THE PUBLIC SERVICE COMMISSION OF FLORIDA

In re: 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.

Docket No. 041393-El

Exhibit No. MEB-2 ( )
ESTIMATE OF DIFFERENTIAL REVENUE REQUIREMENTS
WITH AND WITHOUT PROPOSED UPS AGREEMENTS
BASED ON FPC EXPANSION PLAN ASSUMPTIONS

On behalf of

White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate – White Springs

Project 8400 May 13, 2005



BRUBAKER & ASSOCIATES, INC. St. Louis, MO 63141-2000

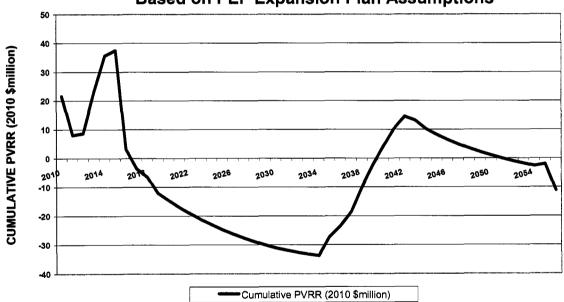
PLORIDA PUBLIC SERVICE COMMISSION

COMPANY/White Springs

WITNESS: Maurice Brutaker (MEB. DATE 06/02/05

Docket No. 041393 - El Witness: Maurice Brubaker Exhibit No. MEB - 2 (\_\_\_) Comparative Revenue Requirements

# Estimate of Differential Revenue Requirements With and Without Proposed UPS Agreements Based on PEF Expansion Plan Assumptions



Docket No. 041393-El Witness: Maurice Brubaker Exhibit No. MEB-3 ( ) Actual and Projected PEF Gas/Oil Reliance

# BEFORE THE PUBLIC SERVICE COMMISSION OF FLORIDA

In re: 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.

Docket No. 041393-El

Exhibit No. MEB-3 ( )
ACTUAL AND PROJECTED PEF GAS/OIL RELIANCE

On behalf of

White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate – White Springs

Project 8400 May 13, 2005



Brubaker & Associates, Inc. St. Louis, MO 63141-2000

FLORIDA PUBLIC SERVICE COMMIGSION DOCKET

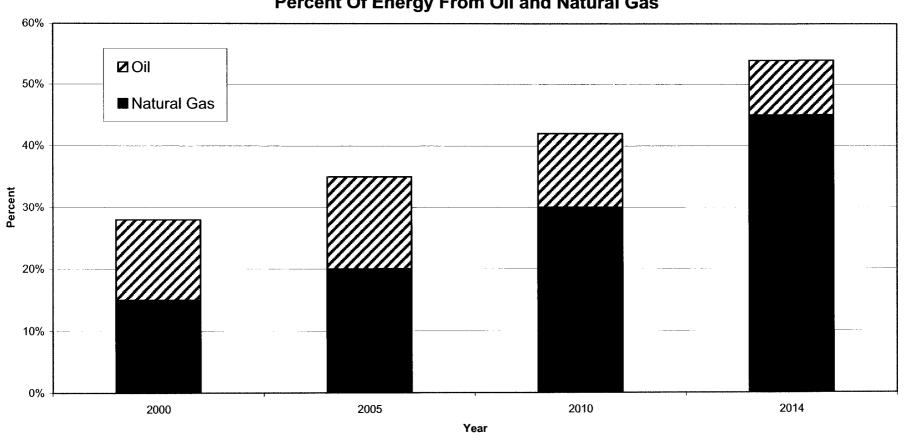
NO. <u>04/393-ET</u> EXHIBIT NO. COMPANY! White & OCCUPANY!

WITNESS: Maurice Brubo to

DATE \_\_\_\_06/02/05

Docket No. 041393-EI Witness: Maurice Brubaker Exhibit No. MEB- 3 (\_\_\_\_) Actual and Projected PEF Gas/Oil Reliance

# Progress Energy Florida Percent Of Energy From Oil and Natural Gas



Source: 10 year PEF Site Plans for April 2001 and April 2005.

Docket No. 041393-EI Witness: Maurice Brubaker Exhibit No. MEB-4 ( ) POD-13

### REDACTED VERSION

# BEFORE THE PUBLIC SERVICE COMMISSION OF FLORIDA

In re: 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.

Docket No. 041393-El

Exhibit No. MEB-4 ( ) POD-13

On behalf of

White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate – White Springs

Project 8400 May 13, 2005



Brubaker & Associates, Inc.

PLORIDA PUBLIC SERVICE COMMINISION

DOCKET

NO. 04/393-EZ EXHIBIT NO 23

COMPANY/ White Springs
WITNESS: DAgurice Brussker (MEB-1

From:

"McKeage, Mark D" <Mark.McKeage@pgnmail.com>

To:

"Crisp, John (Ben)" <Ben.Crisp@pgnmail.com>, "Waters, Samuel"

<Samuel.Waters@pgnmail.com>, "Niekum, Robert D" <Robert.Niekum@pgnmail.com>, "Cari, Michael

A." < Michael. Carl@pgnmail.com >

Date:

11/30/2004 11:08:21 AM

Subject:

Southern Company UPS Extension - Transmission Requests

All,

We have initiated PEF's request for transmission for the extension of the Southern Company UPS Agreement.

#### Background

Two contracts for capacity were signed by PEF and SouCo this week. Under the contracts' provisions, PEF is required to submit it's transmission requests within thirty days.

#### Steps

1. PEF to submit Scherer transmission request - 74 MW; Scherer Plant as source, FPC as sink. Annual request

for term June 1, 2010 through May 31, 2015 (Southern Company will only accept whole years, leaving PEF to

request rollover for the final seven months of the contract at a later date). PEF to include in Comments "Rollover

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3. For each request, SouCo will send PEF an application for service and a deposit sheet. SouCo will send out

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4. PEF will complete the applications and submit them with deposit checks; \$613,725. for Miller and \$129,759. for

Scherer. PEF will complete the applications this month.

5. SouCo will send PEF Letter Agreements, that outline the studies that SouCo will perform to determine

Available Transmission Capacity (ATC). Both Parties will need to sign the Letter Agreements. SouCo stated that they

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6. SouCo will perform studies and make PEF aware of the results. SouCo stated that they could take as long as sixty

days to perform these studies, though they anticipated quicker turn-around than that.

- Assuming the studies result in ATC being found, PEF will request redirection of the Miller ATC to the Franklin Plant.
- 8. SouCo will act on PEF's request for redirection. If the redirection is denied. PEF can back out of the transmission from Miller. No timeline was given for this action.

#### Question

1. Who needs to initiate check requests? Out of whose account will this



money come? The amounts above are my best estimate of the charges. SouCo will let us know in their application cover letter the exact amounts they require for deposits.



Thanks, Mark

CC: "Eckelkamp, Jim" <james.eckelkamp@pgnmail.com>, "Pierpont, John M." <John.Pierpont@pgnmail.com>, "Futch, Kimberly M" <Kimberly.Futch@pgnmail.com>

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From:

"Eckelkamp, Jim" <james.eckelkamp@pgnmail.com>

To:

"McKeage, Mark D" <Mark.McKeage@pgnmail.com>, "Crisp, John (Ben)"

<Ben.Crisp@pgnmail.com>, "Waters, Samuel" <Samuel.Waters@pgnmail.com>, "Niekum, Robert D"

<Robert.Niekum@pgnmail.com>, "Carl, Michael A." <Michael.Carl@pgnmail.com>

Date:

12/1/2004 1:05:58 PM

Subject:

RE: Southern Company UPS Extension - Transmission Requests

Attached are the application for service and the application of deposit for the transmission in SOCO for the UPS generation. I have entered the data required with the exception of the signature. Please advise as to how we are going to provide the deposit. I will overnight the application and cover letter to SOCO tonight/tomorrow. Thanks

Jim E

<app firm PTP.doc>> <<app for deposit.doc>>

> ---Original Message---

> From:

McKeage, Mark D

> Sent:

Tuesday, November 30, 2004 11:08 AM

> To: Crisp, John (Ben); Waters, Samuel; Niekum, Robert D; Carl,

> Michael A.

> Cc: Eckelkamp, Jim; Pierpont, John M.; Futch, Kimberly M

> Subject:

Southern Company UPS Extension - Transmission Requests

- A

> All,

>

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> the Southern Company UPS Agreement.

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> is required to submit it's transmission requests within thirty days.

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> the applications and deposit sheets today.

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> Scherer. PEF will complete the applications this month.





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- > Available Transmission Capacity (ATC). Both Parties will need to sign
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>

- > Question
- > 1. Who needs to initiate check requests? Out of whose account will
- > this money come? The amounts above are my
- > best estimate of the charges. SouCo will let us know in their
- > application cover letter the exact amounts they require
- > for deposits.

>

> Thanks.

> Mark

**CC:** "Pierpont, John M." < John.Pierpont@pgnmail.com>, "Futch, Kimberly M" < Kimberly.Futch@pgnmail.com>







## Southern Company's Application for Firm Point-To-Point Transmission Service Between Southern Company and Florida Power Corp. d.b.a. Progress Energy Florida

### Identity of entity requesting service:

Name: Florida Power Corp. d.b.a. Progress Energy Florida

Address 411 Fayetteville St. Mall, Raleigh, NC.27602

Telephone Number: 919-546-2776

Fax Number: 919-546-3374

A statement that the entity requesting service is, or will be upon commencement of service, an Eligible Customer under the Southern Company Open Access Tariff:

Florida Power Corporation d.b.a. Progress Energy Florida is an eligible customer under Southern Company Open Access Tariff and is requesting Firm point to Point Service

Location of the generating facility(ies) supplying the capacity and energy and the location of the load ultimately served by the capacity and energy transmitted:

Generating facilities are located in Southern Company control area. The load is located in Florida Power Corp. control area

Southern Company will treat this information as confidential except to the extent that disclosure of this information is required by the Tariff, by regulatory purposes pursuant to Good Utility Practice or pursuant to RTG transmission information sharing agreements. Southern Company shall treat this information consistent with the standards of conduct contained in Part 37 of the Federal Energy Regulatory Commission's regulations.

A description of the supply characteristics of the capacity and energy to be delivered: Firm capacity and energy from the Southern Company control area

An estimate of the capacity and energy expected to be delivered to the Receiving Party: Maximum amount of capacity and energy to be transmitted is 424 Mws (Total reserved capacity).

The Service Commencement Date and the term of the requested Transmission Service: Service starts on June 01, 2010 and terminates on June 01, 2015

The transmission capacity requested for each Point of Receipt and each Point of Delivery on Southern Company's Transmission System: A combined reserved capacity of 424 Mws for a point of receipt of SOCO and a point of delivery of FPC. Oasis # 519354 and 519355

Customers may combine their requests for service in order to satisfy the minimum Transmission capacity requirement.

Southern Company will treat application information consistent with the standards of conduct contained in Part 37 of the Commission's regulations.

#### Deposit for firm transactions

A Completed Application for Firm Point-to-Point Transmission Service also shall include a deposit of either one month's charge for Reserved Capacity or the full charge for Reserved Capacity for service requests of less than one month. If the Application is rejected by the Transmission Provider because it does not meet the conditions for service as set forth herein, or in the case of requests for service arising in connection with the losing bidders in a Request for Proposals (RFP), said deposit shall be returned with interest less any reasonable costs incurred by the Transmission Provider in connection with the review of the losing bidder's Application. The deposit also will be returned with interest less any reasonable costs incurred by the Transmission Provider if the Transmission Provider is unable to complete new facilities needed to provide the service. If an Application is withdrawn or the Eligible Customer decided not to enter into a Service Agreement for Firm Point-to-Point Transmission Service, the deposit shall be refunded in full, with interest, less reasonable costs incurred by the Transmission Provider to the extent such costs have not already been recovered by the Transmission Provider from the Eligible Customer. The Transmission Provider will provide to the Eligible Customer a complete accounting of all costs deducted from the refunded deposit, which the Eligible Customer may contest if there is a dispute concerning the deducted costs. Deposits associated with construction of new facilities are subject to the provisions of Section 19 of the Southern Company Open Access Tariff. If a Service Agreement for Firm Point-to-Point Transmission Service is executed, the deposit, with interest, will be returned to the Transmission Customer upon expiration of the Service Agreement for Firm Point-to-Point Transmission Service. Applicable interest shall be computed in accordance with the Commission's regulations and shall be calculated from the day the deposit check is credited to Southern Company's account.

> Birmingham, AL 35291-8210 Phone (205)257-4483 Fax (205)257-6654 e-mail: rmgrisso@southernco.com

Application submitted by: Name	Title: Transmission Coordinator
Date:	
Phone number: 919-546-2776	Fax Number: 919-546-3374
Date Application was submitted	
Date and Time Application was received l	by Southern Company
Date and Time Application was accepted	by Southern Company
Application for Firm Point-to-Point Trans	smission Service should be sent to:
	Rebecca Martin
	Southern Company Services, Inc.
	13N-8812
	600 North 18th Street

# Southern Company Transmission Deposit Information Sheet



Transmission Customer: Florida Power Corporation

Contact at Customer site: Jim Eckelkamp

OASIS Reference Numbers: 519354,519355

Date of OASIS Request: 11/30/2004

Transmission Rate used for calculation of deposit: 1,704.29 \$/MW-Month

Ancillary rates used for calculation of deposit:

Scheduling (80.60 \$/MW-Month) and Reactive (\$110.00 \$/kW-Month)

MW used for calculation of deposit: 424 MW (Sum of 2 requests)

Total deposit required for this OASIS request: \$803,433.36

Deposit is administered pursuant to Section 17.3 of Southern Companies Open Access

Transmission Tariff.

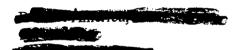
### Wiring Instructions

The transfer of funds for firm transmission deposits should be wired to the following:

To:

ABA Number: For Credit To:

Account Number:



For questions about firm transmission service under the Tariff, please contact:

Rebecca Martin, PE Transmission Services Analyst Southern Company Services, Inc. 600 North 18<sup>th</sup> Street 13N-8812

Phone: 205-257-4483 Fax: 205-257-6654



From:

"McKeage, Mark D" <Mark.McKeage@pgnmail.com>

To:

"Waters, Samuel" <Samuel.Waters@pgnmail.com>

Date:

1/26/2005 4:24:40 PM

Subject:

Southern Company Letter Agreement

Sam,

We are awaiting Southern Company's letter agreement for the transmission study they will be performing this quarter (hopefully). I called to check the status of the development of that letter, and was told that they are in the process of drafting it, but had a couple of questions of us. Specifically, SouCo would like to know what the sources of capacity are post-redirection, and how many MW from each of those resources. In speaking with John this morning, we believe that the answers are:

74 MW Scherer #3; and 350 MW Franklin #1.

To the extent possible, I will provide an answer at the plant level (Scherer and Franklin), but John and I wanted to make sure that the numbers above are your understanding, as well. They look right, per the contracts.

We are available to speak with you at your convenience, if necessary.

Thanks, Mark

CC:

"Pierpont, John M." < John.Pierpont@pgnmail.com>



"Martin, Rebecca Ann" <REBEMART@southernco.com>

To:

"McKeage, Mark D" < Mark.McKeage@pgnmail.com>

Date:

3/4/2005 9:38:32 AM

Subject:

**FPC Rollover Requests** 

Mark,

Please see the attached draft letter agreement regarding the FPC rollover requests on the Southern OASIS.

<<FPC letter Rollover.DOC>>

Please let me know if you have any questions.

Hope all is well!

**Thanks** 

Rebecca Martin SCS - Transmission Policy & Services 600 N 18th Street/ 13N-8812 Birmingham, Alabama 35291 Phone 205.257.4483 Fax 205.257.6654

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CC:

"Eckelkamp, Jim" <james.eckelkamp@pgnmail.com>



CONFIDENTIAL (14)

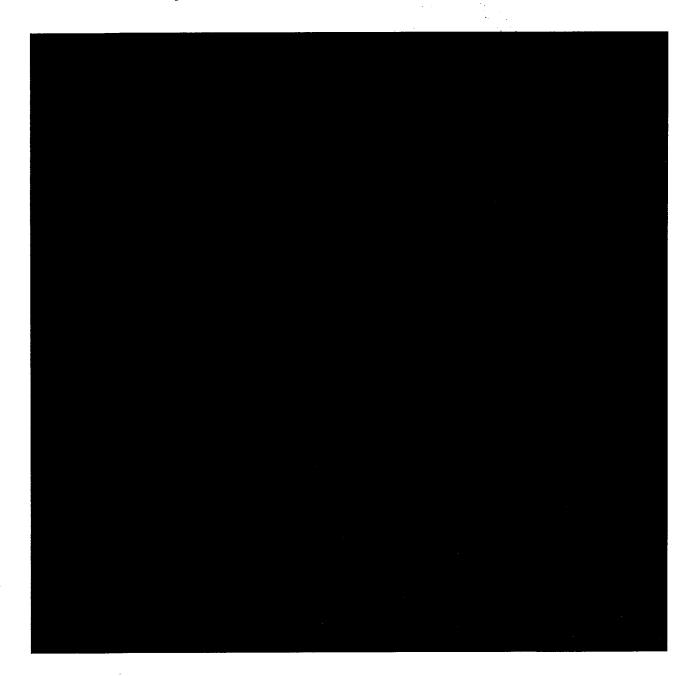
Southern Company Services, Inc. Post Office Box 2625 Birmingham, Alabama 35202

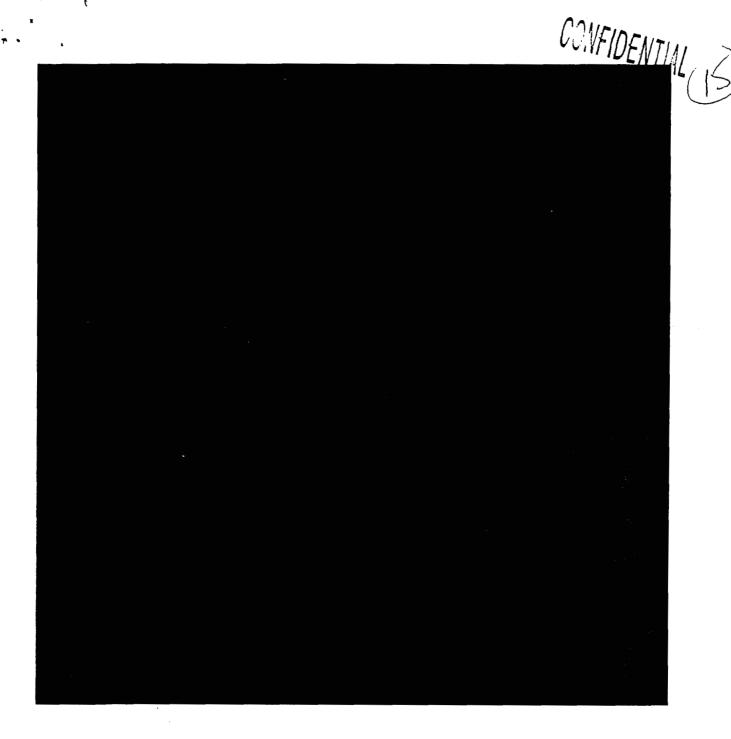


Energy to Serve Your World

March 4, 2005

Mr. Mark McKeage Florida Power Corporation





Sincerely,

James M. Howell
Manager, Transmission Policy & Services
Southern Company Services, Inc., as agent for Alabama
Power Company, Georgia Power Company, Gulf Power
Company, Mississippi Power Company, and Savannah
Electric and Power Company

Agreement and consent acknowledged:

CONFIDENTIAL

Florida Power Corporation	
Signature:	-
Jota	

"McKeage, Mark D" <Mark.McKeage@pgnmail.com>
"Martin, Rebecca Ann" <REBEMART@southernco.com>

To: Date:

3/9/2005 10:51:35 AM

Subject:

RE: FPC letter Rollover.DOC

Rebecca,

We have signed the Letter Agreement, and returned one original to Mr. Howell.

We look forward to the confirmation of FPC's transmission request, at which time, we will request redirection.

Thanks, Mark

----Original Message----

From: Martin, Rebecca Ann [mailto:REBEMART@southernco.com]

Sent: Monday, March 07, 2005 9:31 AM

To: McKeage, Mark D

Subject: RE: FPC letter Rollover.DOC

Mark,

I got a little bit ahead of myself last week! We'll execute the letter agreement and overnight you copies to sign.

thanks!!!!

Rebecca Martin SCS - Transmission Policy & Services 600 N 18th Street/ 13N-8812 Birmingham, Alabama 35291 Phone 205.257.4483 Fax 205.257.6654

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----Original Message----

From: McKeage, Mark D [mailto:Mark.McKeage@pgnmail.com]

Sent: Friday, March 04, 2005 4:04 PM

To: Martin, Rebecca Ann

Subject: RE: FPC letter Rollover.DOC

Rebecca.

(17)

Would you prefer that FPC sign first, and mail two originals to you?

Thanks, Mark

----Original Message----

From: Martin, Rebecca Ann [mailto:REBEMART@southernco.com]

Sent: Friday, March 04, 2005 4:45 PM

To: McKeage, Mark D Cc: Eckelkamp, Jim

Subject: RE: FPC letter Rollover.DOC

Hello Mark!

I have incorporated the requested changes to the letter agreement which is attached.

Please let me know if you have any additional questions.

thanks becca

Rebecca Martin SCS - Transmission Policy & Services 600 N 18th Street/ 13N-8812 Birmingham, Alabama 35291 Phone 205.257.4483 Fax 205.257.6654

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---Original Message----

From: McKeage, Mark D [mailto:Mark.McKeage@pgnmail.com]

Sent: Friday, March 04, 2005 10:57 AM

To: Martin, Rebecca Ann Cc: Eckelkamp, Jim

Subject: FW: FPC letter Rollover.DOC

#### Rebecca,

Please see attached minor changes. If Southern Company accepts these changes, FPC is prepared to sign.



"Martin, Rebecca Ann" < REBEMART@southernco.com>

To:

"McKeage, Mark D" <Mark.McKeage@pgnmail.com>, "Eckelkamp, Jim"

<james.eckelkamp@pgnmail.com>

Date:

3/15/2005 10:33:51 AM

Subject:

**FPC Rollover Requests** 

Morning Mark and Jim!

Thanks for executing the letter agreement so promptly.

When you are ready, please contact me so I can walk you through how to submit the redirect request on OASIS. This will be a very simple manner since you are only redirecting one request.

I will be out of the office Wednesday and Thursday of this week but will be back in the office on Friday.

Thanks becca

Rebecca Martin SCS - Transmission Policy & Services 600 N 18th Street/ 13N-8812 Birmingham, Alabama 35291 Phone 205.257.4483 Fax 205.257.6654

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"McKeage, Mark D" <Mark, McKeage@pgnmail.com>

To:

"Waters, Samuel" <Samuel, Waters@pgnmail.com>, "Crisp, John (Ben)"

<Ben.Crisp@pgnmail.com>

Date:

3/16/2005 2:54:27 PM

Subject:

FW: FPC Rollover Requests

All,

We have confirmed transmission for Scherer and Miller capacity, and have requested redirection of Miller to Franklin. We will let you know when Southern acts on that request.

Thanks, Mark

----Original Message----

From: Martin, Rebecca Ann [mailto:REBEMART@southernco.com]

Sent: Tuesday, March 15, 2005 10:34 AM To: McKeage, Mark D; Eckelkamp, Jim Subject: FPC Rollover Requests

Morning Mark and Jim!

Thanks for executing the letter agreement so promptly.

When you are ready, please contact me so I can walk you through how to submit the redirect request on OASIS. This will be a very simple manner since you are only redirecting one request.

I will be out of the office Wednesday and Thursday of this week but will be back in the office on Friday.

Thanks becca

>

Rebecca Martin SCS - Transmission Policy & Services 600 N 18th Street/ 13N-8812 Birmingham, Alabama 35291 Phone 205.257.4483 Fax 205.257.6654

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CC: "Niekum, Robert D" <Robert.Niekum@pgnmail.com>, "Carl, Michael A." <Michael.Carl@pgnmail.com>, "Pierpont, John M." <John.Pierpont@pgnmail.com>, "Futch, Kimberly M"



<Kimberly.Futch@pgnmail.com>, "Eckelkamp, Jim" <james.eckelkamp@pgnmail.com>



"Eckelkamp, Jim" <james.eckelkamp@pgnmail.com>
"McKeage, Mark D" <Mark.McKeage@pgnmail.com>

To: Date:

3/29/2005 3:03:44 PM

Subject:

FW: Application for Redirects

Mark,

Attached is the application for the Redirect. I forgot to cc you when I sent it back to Rebecca at SOCO. Sorry!!!!
Thanks

Jim E

---Original Message----From: Eckelkamp, Jim

Sent: Tuesday, March 29, 2005 8:49 AM

To: 'Martin, Rebecca Ann'

Subject: RE: Application for Redirects

Rebecca,

Sorry for the delay in getting this back to you. Have completed the form and returning to you by e-mail and will fax a hard copy has well. Please advise of any further needs or changes Thanks

Jim E

----Original Message----

From: Martin, Rebecca Ann [mailto:REBEMART@southernco.com]

Sent: Wednesday, March 23, 2005 12:49 PM

To: Eckelkamp, Jim

Subject: Application for Redirects

Hello Jim!

Can you fill out the attached application for the redirect submitted on 3/15/2005?
<<a href="mailto:app-firm-PTP.doc"><a href="mailto:app-firm

Rebecca Martin SCS - Transmission Policy & Services 600 N 18th Street/ 13N-8812 Birmingham, Alabama 35291 Phone 205.257.4483 Fax 205.257.6654

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telephone at 205-257-4483.

(2)





Southern Company's Application for Firm Point-To-Point Transmission Service

Between Southern Company and \_\_Florida Power Corporation (dba - Progress Energy Florida)

Oasis Ref # 536163

Name:Progress Energy Florida
A statement that the entity requesting service is, or will be upon commencement of service, an Eligible Customer under the Southern Company Open Access Tariff:Progress Energy Florida is an eligible customer under Southern
A statement that the entity requesting service is, or will be upon commencement of service, an Eligible Customer under the Southern Company Open Access Tariff: Progress Energy Florida is an eligible customer under Southern
under the Southern Company Open Access Tariff:Progress Energy Florida is an eligible customer under Southern
under the Southern Company Open Access Tariff:Progress Energy Florida is an eligible customer under Southern
Location of the generating facility(ies) supplying the capacity and energy and the location of the load ultimately served by the capacity and energy transmitted:Generating facilities are located in Southern Control area (Franklin unit). The load is located in Progress Energy Florida (FPC) control area
Southern Company will treat this information as confidential except to the extent that disclosure of this information is required by the Tariff, by regulatory purposes pursuant to Good Utility Practice or pursuant to RTG transmission information sharing agreements. Southern Company shall treat this information consistent with the standards of conduct contained in Part 37 of the Federal Energy Regulatory Commission's regulations.
A description of the supply characteristics of the capacity and energy to be delivered:Firm Capacity and Energy from Southern control area
An estimate of the capacity and energy expected to be delivered to the Receiving Party:

The transmission capacity requested for each Point of Receipt and each Point of Delivery on Southern Com Transmission System: A reserved capacity of 350 mws for a point of receipt of SOCO (Franklin unit) and a delivery of FPC. Oasis Ref # 536163	
Customers may combine their requests for service in order to satisfy the minimum Transmission capacity requirement.	

Southern Company will treat application information consistent with the standards of conduct contained in Part 37 of the Commission's regulations.

### Deposit for firm transactions

A Completed Application for Firm Point-to-Point Transmission Service also shall include a deposit of either one month's charge for Reserved Capacity or the full charge for Reserved Capacity for service requests of less than one month. If the Application is rejected by the Transmission Provider because it does not meet the conditions for service as set forth herein, or in the case of requests for service arising in connection with the losing bidders in a Request for Proposals (RFP), said deposit shall be returned with interest less any reasonable costs incurred by the Transmission Provider in connection with the review of the losing bidder's Application. The deposit also will be returned with interest less any reasonable costs incurred by the Transmission Provider if the Transmission Provider is unable to complete new facilities needed to provide the service. If an Application is withdrawn or the Eligible Customer decided not to enter into a Service Agreement for Firm Point-to-Point Transmission Service, the deposit shall be refunded in full, with interest, less reasonable costs incurred by the Transmission Provider to the extent such costs have not already been recovered by the Transmission Provider from the Eligible Customer. The Transmission Provider will provide to the Eligible Customer a complete accounting of all costs deducted from the refunded deposit, which the Eligible Customer may contest if there is a dispute concerning the deducted costs. Deposits associated with construction of new facilities are subject to the provisions of Section 19 of the Southern Company Open Access Tariff. If a Service Agreement for Firm Point-to-Point Transmission Service is executed, the deposit, with interest, will be returned to the Transmission Customer upon expiration of the Service Agreement for Firm Point-to-Point Transmission Service. Applicable interest shall be computed in accordance with the Commission's regulations and shall be calculated from the day the deposit check is credited to Southern Company's account.

Application submitted by: Name _James E	ckelkamp	Title: _Analyst Date: 3-29-2005
Phone number919-546-2776	Fax Number	919-546-3374
Date Application was submitted3-29-200:	5	
Date and Time Application was received by	Southern Company	
Date and Time Application was accepted by	Southern Company	
Application for Firm Point-to-Point Transm	ission Service should Rebecca Mar	
Se	outhern Company Se	ervices, Inc.

13N-8812 600 North 18th Street Birmingham, AL 35291-8210 Phone (205)257-4483 Fax (205)257-6654 e-mail: rmgrisso@southernco.com

"Martin, Rebecca Ann" <REBEMART@southernco.com>
"Eckelkamp, Jim" <james.eckelkamp@pgnmail.com>

To: Date:

4/12/2005 10:46:43 AM

Subject:

SIS agreement

Jim,

Please see the attached SIS for the redirect request form Progress Florida. <<SIS -FPCM536163.doc>> Please let me know if you have any questions.

Thanks becca

Rebecca Martin SCS - Transmission Policy & Services 600 N 18th Street/ 13N-8812 Birmingham, Alabama 35291 Phone 205.257.4483 Fax 205.257.6654

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CC:

"McKeage, Mark D" <Mark.McKeage@pgnmail.com>





Energy to Serve Your World

Rebecca Martin, PE Transmission Analyst Transmission Services Southern Company Services, Inc.

600 North 18th Street/13N-8812

Post Office Box 2641

Birmingham, Alabama 35291-8210

Tel 205.257.4483 Fax 205.257.6654

April 12, 2005

VIA ELECTRONIC MAIL

Mr. Jim Eckelkamp Progress Energy Florida 411 Fayetteville Street Mall Raleigh, North Carolina 27602

Dear Jim,

This letter is being sent in regards to requests for transmission service by Progress Energy Florida("FPCM") under the Southern Company Open Access Transmission Tariff ("Tariff"). This request has OASIS Reference Number 536163.

Pursuant to Section 17.5 of the Tariff, Southern Company has attempted to make a determination of the available transmission capacity relative to the FPCM requests noted above. A System Impact Study will be required to determine an accurate amount of available transmission capacity for the requested time periods.

If FPCM desires for Southern Company to perform a System Impact Study regarding these requests, please complete the System Impact Study Agreement shown in Attachment A. This Agreement should be signed by an authorized official at FPCM and returned within 15 days.

As indicated in the attached Agreement, an estimate of the actual cost of the system impact study is \$10,000. It is agreed, however, that if the actual cost of the study differs from that estimate, FPCM shall pay the actual cost. Payment of the estimated System Impact Study costs will need to be received by Southern Company before the Study will begin. The payment can be sent either via wire transfer or in a check (made payable to Southern Company Services, Inc.) mailed to the address shown above. Wiring instructions for Southern Company's account are shown in Attachment B.

Southern Company estimates that the study will be completed within sixty (60) days of its receipt of the executed Agreement. If unable to complete the study within that period,

Southern Company will notify FPCM and provide an estimated completion date along with an explanation of the reasons why additional time is required.

If you have questions, please contact me at (205) 257-4483.

Sincerely,

Rebecca Martin, PE

Transmission Services Analyst, Transmission Services

/mfp





## SYSTEM IMPACT STUDY AGREEMENT BETWEEN SOUTHERN COMPANY AND Progress Energy Florida (FPCM) OASIS Requests 536163.

- 1.0 This System Impact Study Agreement, dated as of \_\_\_\_\_\_\_, is entered into by and between Southern Company Services, Inc., as agent for Alabama Power Company, Georgia Power Company, Gulf Power Company, Mississippi Power Company and Savannah Electric and Power Company (collectively referred to as "Transmission Provider"), and <a href="FPCM">FPCM</a> ("Eligible Customer")(Transmission Provider and Eligible Customer may be jointly referred to as the "Parties").
- 2.0 Under the Southern Company Open Access Transmission Tariff ("Tariff"), the Transmission Provider is required to determine whether a System Impact Study is needed to accommodate a request for transmission service. If a System Impact Study is so required, then the party requesting transmission service must execute a System Impact Study Agreement or that party's application is deemed withdrawn.
- 3.0 On <u>March 15, 2005</u>, the Eligible Customer requested transmission delivery service from the Transmission Provider under the Tariff. The Transmission Provider has determined that a System Impact Study is necessary to accommodate that request. The Transmission Provider hereby agrees to perform such a System Impact Study; provided, however, that the Parties agree that Transmission Provider may contract with one or more third parties to perform all or part of such System Impact Study. The Eligible Customer hereby agrees to pay for such System Impact Study in accordance with this Agreement.
- 4.0 The Eligible Customer shall pay all of the actual costs incurred by Transmission Provider in performing the System Impact Study, including any costs associated with having one or more third parties perform all or part of such System Impact Study. The Transmission Provider's estimate of the actual cost of the System Impact Study is 10,000. It is agreed, however, that if the actual cost of the Study differs from that estimate, the Eligible Customer shall pay the actual cost. Transmission Provider may invoice Eligible Customer on a monthly basis for costs hereunder, and payment in full shall be due from Eligible Customer within ten (10) days of the invoice date. Eligible Customer shall be responsible for any charges Transmission Provider incurs due to Eligible Customer's failure to make payment within such time.
- 5.0 The Transmission Provider estimates that the System Impact Study will be completed within sixty (60) days of its receipt of this Agreement once executed. The Transmission Provider will use due diligence to complete (or have third parties complete) the System Impact Study within that time. If unable to complete (or have completed) the System Impact Study within that period, the Transmission Provider shall notify the Eligible Customer and provide an estimated completion date along with an explanation of the reasons why additional time is required.
- 6.0 The System Impact Study shall identify any system constraints and redispatch options, additional Direct Assignment Facilities or Network Upgrades required to provide the Eligible Customer's requested service. A copy of the completed System Impact Study and related work papers shall be made available to the Eligible Customer.

IN WITNESS WHEREOF, the Parties have caused this System Impact Study Agreement to be executed by their respective authorized officials.



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D	Y	ě

William O. Ball

Title: Sr.Vice-President Date:

As Agent For

Alabama Power Company Georgia Power Company

Gulf Power Company

Mississippi Power Company

Savannah Electric and Power Company,

or Southern Company

Progress 1	Energy	Florida:
------------	--------	----------

By: \_\_\_\_\_\_Date:\_\_\_\_\_\_

(31)

# Attachment B System Impact Study Deposit Information

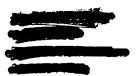
### The transfer of funds for firm transmission deposits should be wired to the following:

To:

ABA Number:

For Credit To:

Account Number:



When funds have been wired, please complete and fax the sheet below to Rebecca M Grissom at (205)257-6654.

Name of Bank:		
ocation of Bank:	City	State
ABA Number:		
Account Number:		
Date of wire transfer:		
Federal Reference Number associated with this transaction:		
Amount of wired deposit:		
Name of entity making deposit:		
Contact at entity making deposit:	Name	
	Telephone Number	

For questions about transmission service under the Tariff, please contact:

Rebecca Martin, PE Transmission Services Analyst 600 North 18th Street/13N-8812 Birmingham, AL 35291-8210 Telephone (205) 257-4483 Telefax (205) 257-6654

Southern Company Open Access Same-time Information System (OASIS) Address: www.weboasis.com/OASIS/SOCO



Energy to Serve Your World

"McKeage, Mark D" < Mark.McKeage@pgnmail.com>

To:

"Hnath, Kelli" < Kelli. Hnath@pgnmail.com>

Date:

4/18/2005 1:42:20 PM

Subject:

RE: SIS agreement

Hi Kelli,

This is based on the third paragraph that states that PEF has 15 days to turn around the signed System Impact Study agreement letter (from the date of the letter, which is April 12, 2005). Since the signed letter is being sent today, I guess the sooner the better on the money, but you're correct in that there is no specific date stated for the money. I was assuming that the due date for the money is the same as the due date of the letter.

Thanks, Mark

----Original Message----

From: Hnath, Kelli

Sent: Monday, April 18, 2005 12:04 PM

To: McKeage, Mark D Subject: RE: SIS agreement

#### Mark,

I don't see anything in the letter about 4/27 as the payment date. What I see in paragraph 4.0 of the request is "...payment shall be due...within ten (10) days of the invoice date." One of our rules for payment processing is that we wire the money on the required payment date - not earlier, and (of course) not later. So, though this is only \$10K, do you have something from SOCO w/ the 4/27 date?

Thanks, Kelli

---Original Message----From: McKeage, Mark D

Sent: Friday, April 15, 2005 11:31 AM

To: Hnath, Kelli Cc: Niekum, Robert D

Subject: FW: SIS agreement

#### Kelli,

Attached is the System Impact Study agreement, invoice and wire transfer form that we discussed on the telephone. Per Javier Portuondo, this invoice should be paid under the same account that Southern UPS is currently paid.

I have asked Jim Eckelkamp to hand carry the original agreement to Rob Caldwell to sign, and then to you, if you need it.



The wire transfer needs to be complete by April 27, 2005. Please let me know if this is any trouble for you.

Thanks for your help, and please let me know if there is anything else you need from me.

Mark McKeage

----Original Message----

From: Martin, Rebecca Ann [mailto:REBEMART@southernco.com]

Sent: Tuesday, April 12, 2005 10:47 AM

To: Eckelkamp, Jim Cc: McKeage, Mark D Subject: SIS agreement

Jim.

Please see the attached SIS for the redirect request form Progress Florida.

<<SIS -FPCM536163.doc>>

Please let me know if you have any questions.

Thanks becca

Rebecca Martin SCS - Transmission Policy & Services 600 N 18th Street/ 13N-8812 Birmingham, Alabama 35291 Phone 205.257.4483 Fax 205.257.6654

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"Martin, Rebecca Ann" < REBEMART@southernco.com>

To:

"Eckelkamp, Jim" <james.eckelkamp@pgnmail.com>

Date:

4/18/2005 5:36:35 PM

Subject:

RE: SIS agreement

Thanks Jim!!

I'll be on the lookout for this information.

Thanks again becca

Rebecca Martin SCS - Transmission Policy & Services 600 N 18th Street/ 13N-8812 Birmingham, Alabama 35291 Phone 205.257.4483 Fax 205.257.6654

>This message may contain material that is subject to the attorney-client communication privilege and/or the attorney-work product doctrine and, thus, may be privileged and confidential. If you are not the intended recipient, any disclosure, distribution, copying, or taking any action in reliance on the contents of this information is strictly prohibited. If you have received this e-mail in error, please reply immediately either by responding to this message or by contacting me by telephone at 205-257-4483.

Original Message

From: Eckelkamp, Jim [mailto:james.eckelkamp@pgnmail.com]

Sent: Friday, April 15, 2005 1:21 PM

To: Martin, Rebecca Ann Cc: McKeage, Mark D Subject: RE: SIS agreement

#### Rebecca,

Have the SIS signed by Rob Caldwell (VP-Regulated Commercial Ops)and will have it mailed overnight on Monday the 18th. Have also given the wire transfer information to Back office who will give it to treasury before noon on Monday which then should be paid on Tuesday the 19th. If any further information or task is needed, please do not hesitate to ask. Thanks for everything!!

Jim E
919-546-2776

----Original Message----

From: Martin, Rebecca Ann [mailto:REBEMART@southernco.com]

Sent: Tuesday, April 12, 2005 10:47 AM

To: Eckelkamp, Jim Cc: McKeage, Mark D Subject: SIS agreement (34)

Jim.



Please see the attached SIS for the redirect request form Progress Florida.

<<SIS -FPCM536163.doc>>

Please let me know if you have any questions.

Thanks becca

Rebecca Martin SCS - Transmission Policy & Services 600 N 18th Street/ 13N-8812 Birmingham, Alabama 35291 Phone 205.257.4483 Fax 205.257.6654

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CC:

"McKeage, Mark D" <Mark.McKeage@pgnmail.com>



"McKeage, Mark D" <Mark.McKeage@pgnmail.com>

To:

"Pierpont, John M." < John. Pierpont@pgnmail.com>

Date:

5/2/2005 10:01:56 AM

Subject:

FW: Southern Company Scan



> ----Original Message----

> From:

Griffith, Margaret A

> Sent:

Monday, May 02, 2005 10:01 AM

> To: McKeage, Mark D

> Subject:

Southern Company Scan

> <<Southern Company.pdf>>

Jim M. Howell, Jr. Manager, Transmission Services Southern Company Services, Inc. 600 North 18th Street Post Office Box 2625 Birmingham, Alabama 35202

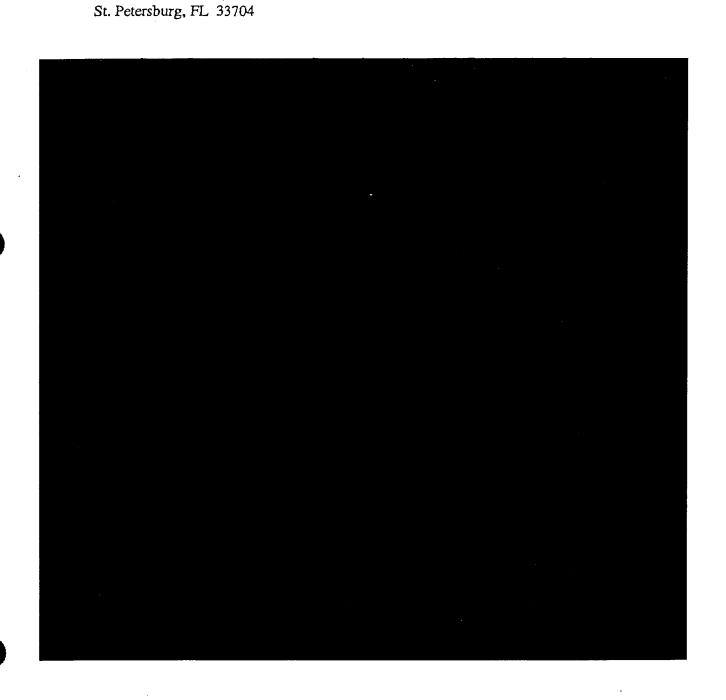
Tel 205.257.3369 Fax 205.257.6654

March 7, 2005

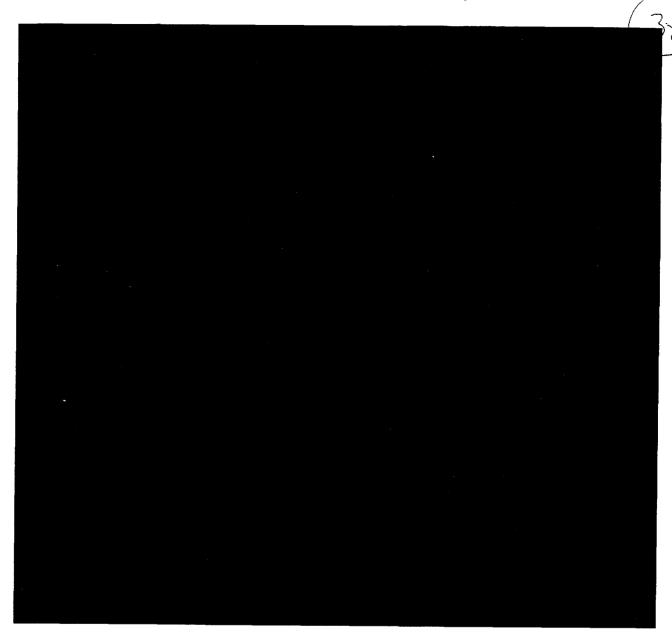
Mr. Mark McKeage Florida Power Corporation d/b/a Progress Energy Florida, Inc. 100 Central Avenue, BT9G CONFIDENTIAL



Energy to Serve Your World"



CONFIDENTIAL



Sincerely,

James M. Howell

Manager, Transmission Policy & Services

Southern Company Services, Inc., as agent for Alabama Power Company, Georgia Power Company, Gulf Power Company, Mississippi Power Company, and Savannah Electric and Power Company

CONFIDENTIAL

Agreement and consent acknowledged:

Robert D. NIE kum
Florida Power Corporation

Signature: Mohnt D. Muhn

Date: March 8, 2005

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"McKeage, Mark D" <Mark.McKeage@pgnmail.com>

To:

"Waters, Samuel" <Samuel.Waters@pgnmail.com>

Date: Subject:

Southern Company Letter Agreement

1/26/2005 4:24:40 PM

Sam,

We are awaiting Southern Company's letter agreement for the transmission study they will be performing this quarter (hopefully). I called to check the status of the development of that letter, and was told that they are in the process of drafting it, but had a couple of questions of us. Specifically, SouCo would like to know what the sources of capacity are post-redirection, and how many MW from each of those resources. In speaking with John this morning, we believe that the answers are:

74 MW Scherer #3; and 350 MW Franklin #1.

To the extent possible, I will provide an answer at the plant level (Scherer and Franklin), but John and I wanted to make sure that the numbers above are your understanding, as well. They look right, per the contracts.

We are available to speak with you at your convenience, if necessary.

Thanks, Mark

CC:

"Pierpont, John M." < John.Pierpont@pgnmail.com>

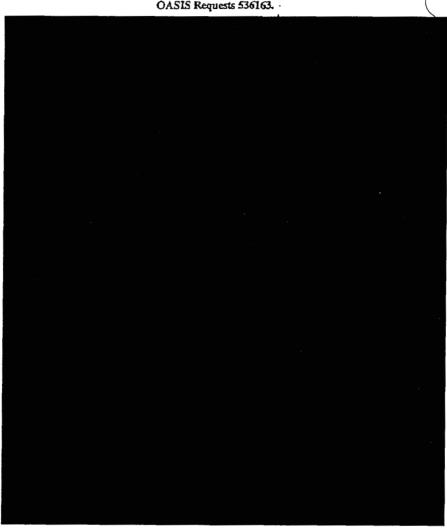


05/05/05 THU 12:50 FAX

CONFIDENTIAL

Ø 002

SYSTEM IMPACT STUDY AGREEMENT BETWEEN SOUTHERN COMPANY AND Progress Energy Florida (FPCM) OASIS Requests 536163.



Ø 003

Southern Company Services, Inc.:

William O. Ball

As Agent For

Alabama Power Company Georgia Power Company Gulf Power Company Mississippi Power Company Savannah Electric and Power Company, or Southern Company

Title: VP-Regulated Commercial Ops Date: 04/15/2005

Rob Caldwell Progress Energy Corporation

Docket No. 041393-EI Witness: Maurice Brubaker Exhibit No. MEB-5 ( ) Excerpts from Southern Company OATT

# BEFORE THE PUBLIC SERVICE COMMISSION OF FLORIDA

In re: 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.

Docket No. 041393-El

# Exhibit No. MEB-5 ( ) EXCERPTS FROM SOUTHERN COMPANY OATT

On behalf of

White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate – White Springs

Project 8400 May 13, 2005



BRUBAKER & ASSOCIATES, INC. St. Louis, MO 63141-2000

COMPANY White Springs WITNESS: Maurice & Brumker (MEB-5)

Original Sheet No. 17

Southern Operating Companies FERC Electric Tariff Fourth Revised Volume No. 5

2 Initial Allocation and Renewal Procedures

2.1 Initial Allocation of Available Transmission Capability: For purposes

of determining whether existing capability on the Transmission Provider's

Transmission System is adequate to accommodate a request for firm service under

this Tariff, all Completed Applications for new firm transmission service received

during the initial sixty (60) day period commencing with the effective date of the

Tariff will be deemed to have been filed simultaneously. A lottery system

conducted by an independent party shall be used to assign priorities for

Completed Applications filed simultaneously. All Completed Applications for

firm transmission service received after the initial sixty (60) day period shall be

assigned a priority pursuant to Section 13.2.

2.2 Reservation Priority For Existing Firm Service Customers: Existing

firm service customers (wholesale requirements and transmission-only, with a

contract term of one-year or more), have the right to continue to take transmission

service from the Transmission Provider when the contract expires, rolls over or is

renewed. This transmission reservation priority is independent of whether the

existing customer continues to purchase capacity and energy from the

Transmission Provider or elects to purchase capacity and energy from another

supplier. If at the end of the contract term, the Transmission Provider's

Transmission System cannot accommodate all of the requests for transmission

service the existing firm service customer must agree to accept a contract term at

least equal to a competing request by any new Eligible Customer and to pay the

current just and reasonable rate, as approved by the

Effective: December 14, 2000

1<sup>st</sup> Rev. Sheet No. 18 superceding Original Sheet No. 18

Effective: August 1, 2002

Commission, for such service. This transmission reservation priority for existing firm service customers is an ongoing right that may be exercised at the end of all firm contract terms of one-year or longer. For existing customers to contracts for Recallable Long-Term Firm Point-To-Point Transmission Service, this transmission reservation priority applies only to the same Point(s) of Receipt and Point(s) of Delivery. Moreover, the charge for Recallable Long-Term Firm Point-To-Point Transmission Service will be subject to renegotiation annually, and Transmission Customers may be required to pay the Tariff charge for Long-Term Firm Point-To-Point Transmission Service in effect at the time service is rendered for the continuation of service along the same path.

### 3 Ancillary Services

Ancillary Services are needed with transmission service to maintain reliability within and among the Control Areas affected by the transmission service. The Transmission Provider is required to provide (or offer to arrange with the local Control Area operator as discussed below), and the Transmission Customer is required to purchase, the following Ancillary Services (i) Scheduling, System Control and Dispatch, and (ii) Reactive Supply and Voltage Control from Generation Sources.

The Transmission Provider is required to offer to provide (or offer to arrange with the local Control Area operator as discussed below) the following Ancillary Services only to the Transmission Customer serving load within the Transmission Provider's Control Area (i) Regulation and Frequency Response, (ii) Energy Imbalance, (iii) Operating Reserve - Spinning, and (iv) Operating Reserve - Supplemental. The Transmission Customer serving load within the Transmission Provider's Control Area is required to acquire these Ancillary Services, whether

Issued by: William K. Newman, Senior Vice President

Issued on: July 1, 2002

Effective: December 14, 2000

required, the provisions of Section 19 will govern the execution of a Service Agreement. Failure of an Eligible Customer to execute and return the Service Agreement or request the filing of an unexecuted service agreement pursuant to Section 15.3, within fifteen (15) days after it is tendered by the Transmission Provider will be deemed a withdrawal and termination of the Application and any deposit submitted shall be refunded with interest. Nothing herein limits the right of an Eligible Customer to file another Application after such withdrawal and termination.

17.7 Extensions for Commencement of Service: The Transmission Customer can obtain up to five (5) one-year extensions for the commencement of service. The Transmission Customer may postpone service by paying a non-refundable annual reservation fee equal to one-month's charge for Firm Transmission Service for each year or fraction thereof. If during any extension for the commencement of service an Eligible Customer submits a Completed Application for Firm Transmission Service, and such request can be satisfied only by releasing all or part of the Transmission Customer's Reserved Capacity, the original Reserved Capacity will be released unless the following condition is satisfied. Within thirty (30) days, the original Transmission Customer agrees to pay the Firm Point-To-Point transmission rate for its Reserved Capacity concurrent with the new Service Commencement Date. In the event the Transmission Customer elects to release the Reserved Capacity, the reservation fees or portions thereof previously paid will be forfeited.

Issued by: William K. Newman, Senior Vice President

Issued on: December 14, 2000

Southern Operating Companies Original Sheet No. 56
FERC Electric Tariff Fourth Revised Volume No. 5

performing the System Impact Study, the Transmission Provider shall rely, to

Impact Study. The charge shall not exceed the actual cost of the study. In

the extent reasonably practicable, on existing transmission planning studies.

The Eligible Customer will not be assessed a charge for such existing studies;

however, the Eligible Customer will be responsible for charges associated

with any modifications to existing planning studies that are reasonably

necessary to evaluate the impact of the Eligible Customer's request for

service on the Transmission System.

(ii) If in response to multiple Eligible Customers requesting service in relation to

the same competitive solicitation, a single System Impact Study is sufficient

for the Transmission Provider to accommodate the requests for service, the

costs of that study shall be pro-rated among the Eligible Customers.

(iii) For System Impact Studies that the Transmission Provider conducts on its

own behalf, the Transmission Provider shall record the cost of the System

Impact Studies pursuant to Section 20.

19.3 System Impact Study Procedures: Upon receipt of an executed System Impact

Study Agreement, the Transmission Provider will use due diligence to complete the

required System Impact Study within a sixty (60) day period. The System Impact

Study shall identify any system constraints and redispatch options, additional Direct

Assignment Facilities or Network Upgrades required to provide the requested

service. In the event that the Transmission Provider is unable to complete the

required System Impact Study within such time period, it shall so notify the Eligible

Effective: December 14, 2000

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Effective: December 14, 2000

Customer and provide an estimated completion date along with an explanation of the reasons why additional time is required to complete the required studies. A copy of the completed System Impact Study and related work papers shall be made available to the Eligible Customer. The Transmission Provider will use the same due diligence in completing the System Impact Study for an Eligible Customer as it uses when completing studies for itself. The Transmission Provider shall notify the Eligible Customer immediately upon completion of the System Impact Study if the Transmission System will be adequate to accommodate all or part of a request for service or that no costs are likely to be incurred for new transmission facilities or upgrades. In order for a request to remain a Completed Application, within fifteen (15) days of completion of the System Impact Study the Eligible Customer must execute a Service Agreement or request the filing of an unexecuted Service Agreement pursuant to Section 15.3, or the Application shall be deemed terminated and withdrawn.

19.4 Facilities Study Procedures: If a System Impact Study indicates that additions or upgrades to the Transmission System are needed to supply the Eligible Customer's service request, the Transmission Provider, within thirty (30) days of the completion of the System Impact Study, shall tender to the Eligible Customer a Facilities Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for performing the required Facilities Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the Facilities Study Agreement and return it to the Transmission Provider within fifteen

1<sup>st</sup> Rev. Sheet No. 65 superceding Original Sheet No. 65

Effective: August 1, 2002

Southern Operating Companies
FERC Electric Tariff Fourth Revised Volume No. 5

22.2

Modification On a Firm Basis: Any request by a Transmission Customer to modify Receipt and Delivery Points on a firm basis shall be treated as a new request for service in accordance with Section 17 hereof, except that such Transmission Customer shall not be obligated to pay any additional deposit if the capacity reservation does not exceed the amount reserved in the existing Service Agreement. While such new request is pending, the Transmission Customer shall retain its priority for service at the existing firm Receipt and Delivery Points specified in its Service Agreement. In addition to the foregoing provisions, Transmission Customers requesting modifications to Receipt and Delivery Points on a firm basis for Recallable Long-Term Firm Point-To-Point Transmission Service may be required to pay the Tariff charge for Long-Term Firm Point-To-Point Transmission Service in effect at time service is rendered for the modified Receipt and Delivery Points.

### 23 Sale or Assignment of Transmission Service

23.1 Procedures for Assignment or Transfer of Service: Subject to Commission approval of any necessary filings, a Transmission Customer may sell, assign, or transfer all or a portion of its rights under its Service Agreement, but only to another Eligible Customer (the Assignee). The Transmission Customer that sells, assigns or transfers its rights under its Service Agreement is hereafter referred to as the Reseller. Compensation to the Reseller shall not exceed the higher of (i) the original rate paid by the Reseller, (ii) the Transmission Provider's maximum rate on file at the time of the assignment, or (iii) the Reseller's opportunity cost capped at the Transmission Provider's cost of expansion. If the Assignee does not request any change in the Point(s) of Receipt or the Point(s) of Delivery, or a change in any other term or condition set

Issued by: William K. Newman, Senior Vice President

Issued on: July 1, 2002

Southern Operating Companies FERC Electric Tariff Fourth Revised Volume No. 5

Original Sheet No. 65A

forth in the original Service Agreement, the Assignee will receive the same services as did the Reseller and the priority of service for the Assignee will be the same as that of the Reseller. A Reseller should notify the Transmission Provider

Issued by: William K. Newman, Senior Vice President

Issued on: July 1, 2002

Effective: August 1, 2002

as soon as possible after any assignment or transfer of service occurs but in any

event, notification must be provided prior to any provision of service to the Assignee.

The Assignee will be subject to all terms and conditions of this Tariff. If the

Assignee requests a change in service, the reservation priority of service will be

determined by the Transmission Provider pursuant to Section 13.2.

23.2 Limitations on Assignment or Transfer of Service: If the Assignee requests a

change in the Point(s) of Receipt or Point(s) of Delivery, or a change in any other

specifications set forth in the original Service Agreement, the Transmission Provider

will consent to such change subject to the provisions of the Tariff, provided that the

change will not impair the operation and reliability of the Transmission Provider's

generation, transmission, or distribution systems. The Assignee shall compensate the

Transmission Provider for performing any System Impact Study needed to evaluate

the capability of the Transmission System to accommodate the proposed change and

any additional costs resulting from such change. The Reseller shall remain liable for

the performance of all obligations under the Service Agreement, except as

specifically agreed to by the Parties through an amendment to the Service Agreement.

23.3 Information on Assignment or Transfer of Service: In accordance with Section 4,

Resellers may use the Transmission Provider's OASIS to post transmission capacity

available for resale.

24 Metering and Power Factor Correction at Receipt and Delivery Points(s)

24.1 Transmission Customer Obligations: Unless otherwise agreed, the Transmission

Customer shall be responsible for installing and maintaining compatible metering and

Issued by: William K. Newman, Senior Vice President

Issued on: December 14, 2000

Effective: December 14, 2000

Progress Energy Florida
Docket No. 041393-EI
Witness: Samuel S. Waters
Exhibit No. \_\_\_\_ (SSW-5)
Comparison of Base and Southern UPS Resource Plans

		SoCo UPS through Dec
	Base Case	2015
	188 MW Winter	188 MW Winter Purchase
2004	Purchase	(Dec '04 - Feb '05)
2005	Hines 3	Hines 3
2006	3 Augm. CTs	
2007	Hines 4	3 Augm. CTs Hines 4
2008	111103 4	Filles 4
2000	* Augm. CT (May 2009)	* Augm. CT (May 2009)
2009	CC	,
2010	* CC (May 2010)	CC SoCo UPS (Jun '10-Dec '15)
2011	CO (May 2010)	* CC (May 2011)
2012	* CC (May 2012)√	= CC (Way 2011)
2013	CC (May 2012)	CC
2014		
2017		* Puv Coal (May 2015)
2015	* Puv Coal (May 2015)	, , ,
2016	1 dv Coai (May 2015)	Puv Coal
2017	* Puv Coal (May 2017)	Augm CT (May 2017)
2018	1 dv Coai (Way 2017)	Augm. CT (May 2017)
2019	* Augm. CT (May 2019)	* CC (May 2018)
2020	* Puv Coal (May 2020)	* D. v. Cool (May 2000)
2021	r uv Coai (iviay 2020)	* Puv Coal (May 2020)
2021	* Pury Cool (May 2022)	* D Co. al. (Mar. 2000)
2022	* Puv Coal (May 2022)	* Puv Coal (May 2022)
2023		
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Note: Units commissioned in December unless otherwise defined

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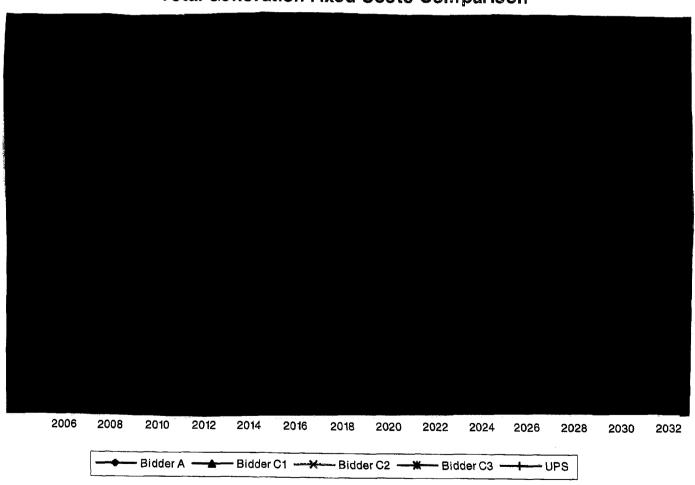
Document Number: Order Number: Fine/Settlement:		Is/Was Confidential: Type:	(·) Other ( ) Motion
Filing Date: Suffix:	06/03/2005	. Inc.	( ) Order ( ) NOI
(CONFIDENTIAL) [x-ref. DN 0437	Hearing Exhibit N	CRIPTION b. 16 (SSW-6) from 6/2/85	hearing.

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DOCKET 041393-EI	EXHIBIT NO LLE
COMPANYIPE FRO	ebutta S. Waters (SSW-6)
DATE 06/02	705

Progress Energy Florida
Docket No. 041393-EI
Witness: Samuel S. Waters
Exhibit No. \_\_\_\_ (SSW-6)
Generation Fixed Costs Comparison

### CONFIDENTIAL

**Total Generation Fixed Costs Comparison** 



THORIDA PUBLIC SERVICE COMMISSION

DOCKET

NO. 041393-EZ EXHIBIT NO 1/0

COMPANYI PET Rebutta

Samuel Siwaters (SSW-6)

TITINESS: DIO 102/05

### Collins, Brian

Email from Dan Roeder to Samuel Waters et al. (POD #9)

From:

Roeder, Dan

Sent:

Wednesday, July 28, 2004 5:51 AM

To:

Waters, Samuel, Crisp, John (Ben); Dolan, Vinny

Cc:

Rana, Sohail

Subject:

RE: Analysis of Southern UPS Contract Extension

Everyone should keep in mind that the analysis done using Strategist does not include start costs or minimum run times. and so the true costs of the Southern UPS are probably on the low side. The more the gas units are started, the more expensive that alternative looks (sliding scale start costs in term sheet). These considerations may be something we want to look at with a more detailed production costing model analysis, like we do when we are evaluating RFPs.

----Original Message----

From:

Waters, Samuel

Sent:

Tuesday, July 27, 2004 5:05 PM

To:

Crisp, John (Ben); Dolan, Vinny

Cc:

Rana, Sohail; Roeder, Dan

Sublect:

Analysis of Southern UPS Contract Extension

I have completed a preliminary analysis, actually more of a review based on others' analyses, of a 5 year extension of the Southern UPS contract (through May, 2015). Based on what I believe to be the most accurate analyses done to date, done by Dan and Rana, the numbers show a net positive NPV (savings) of a range of \$690,000 to \$1,695,000. This includes the direct costs of the deal, including equity impacts and infrastructure costs/credits, such as for gas pipeline fees, transmission charges, and any other related impacts. To get this number, I am using Dan's analysis of 7/7, which showed a net cost of the deal of (8,753,000) and adding the transmission benefit that Rana has calculated of \$9,443,427, NPV, which assumes a 50% utilization efficiency (read we only take advantage of 50% of the potential energy savings across the interface) for all hours. I also used a transmission value of +\$10,448,353 for the larger savings, based on changing the weekend efficiency only to 75%. In my discussions with Rana, he and Mark Oliver believe that 75% may be appropriate for weekend hours.

Since it is late in the day, I haven't been able to backtrack with all parties to make sure I have accurately represented their results. However, I have reviewed the spreadsheets and believe the numbers to be accurately portrayed. If these numbers are verified, I believe that this is the basis for a decision to proceed with the extension.

Unfortunately, I will be out of the office until Monday, August 2. I hope this doesn't cause any problems in proceeding with the next steps.

Feel free to call and leave obscene messages on my voicemail. I will respond as soon as I get back.

Document Number: 05423-05 Order Number:	Is/Was Confidential: Y Tupe: (•) Other
Fine/Settlement: N Filing Date: 06/06/2005 Suffix: EI	( ) Motion ( ) Order ( ) NOI
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DATE		6-02	-05		

Email from Roger Kramer to Dan

Roeder (POD #9)

### Collins, Brian

From: Kramer, Roger

**Sent:** Thursday, July 01, 2004 6:39 AM

To: Roeder, Dan RE: Southern UPS

Well said.

----Original Message-----

From: Roeder, Dan

**Sent:** Thursday, July 01, 2004 7:17 AM

To: Penny, Ron; Pistole, David; Kramer, Roger; Daly, John; Pierpont, John M.; Niekum, Robert D; Boulmay, Ramon; Harris, John; Crisp,

John (Ben); Waters, Samuel

Subject: Southern UPS

Attached is the economic analysis I have performed on the Southern UPS extension. The sheet named PlanSummary provides the base resource plan and the resource plan if we were to do the deal. The sheet named DeferralAnalysis provides the economic analysis (please note, that like most SPOD analyses, this is a revenue requirements analysis, not a cash flow analysis). If you have any questions, please let me know.

<< File: Deferral Analysis\_SouthernCo2b\_2015 wTransmission\_052704.xls >>

As I mentioned during the conference call, I don't see the need to rush into doing this deal. It doesn't start until 2010, so there should be plenty of time to find alternatives (an RFP would probably be the best way to do this).

I also do not see any evidence that supports that this is a good deal or that even Southern thinks the pricing is lower cost than ours. Southern knows what our costs are (by virtue of us publishing them in our last RFP). Plant Franklin is a couple of years old now (eight years old by the time we would be purchasing from it); yet, we will essentially be paying the equivalent of the cost of a new plant (in 2010) for it. If Southern is next in line for the interface, and they really wanted it and saw great value in it, why would they want to make deal with us in the first place? Therefore, my conclusion is they must see that they can make more money from us on this deal than they could by getting control of the interface and selling into Florida through some other deal to other parties. Furthermore, if we were to lose the interface and Southern used it to sell into Florida, taking load that we might otherwise sell to, that would only help to alleviate any capital crunch we allegedly might have in the future (although I agree with John Daly that that is not a true claim) since we wouldn't have to build for that load.

As for SPOD being the sponsor of this BAP, my feeling (Ben can overrule me on this) is that SPOD should NOT be the sponsor. Our analysis has shown that this is not an economic deal (other considerations aside); therefore, someone else is going to have to "carrying the water" on this one. Obviously, if we are going to do this deal, it is going to have to be for reasons other than the economic analysis we have done. I think that whoever is going to show that this is a good deal should be the sponsor of this BAP. Perhaps Vinny should be the sponsor.

--Dan

### Dan Roeder

Project Leader System Resource Planning PEB 7A VNet> 770-7966 T> (919) 546-7966 F> (919) 546-7558 daniel.roeder@pgnmail.com

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DOCUMENT NUMBER-DATE

Ca	lling.	Brian

Docket No. 041393-EI White Springs Exhibit No. \_

Email from Samuel Waters transmitting Baseload Generation Study (POD #5)

From:

Waters, Samuel

Sent:

Wednesday, April 21, 2004 2:14 PM Crisp, John (Ben); Davis, Tom J.

To: Subject:

Baseload Generation Presentation for 4/26

Before this goes out to a larger audience, I thought I'd send you a draft of what I have so far. I fully expect to have a couple more strategist results before Friday, and I will include them in the presentation as well. Many of the slides are included without comment, but it is my intent to add commentary leading to the following:

- Coal options are not cost effective for the 2013 decision, based on the B&M data.

- Nuclear looks good,(truly too good to be true) but cannot be completed by 2013. Maybe 2015 at best. Requires more study.

- Pet coke makes IGCC and AFB look really good, but there are question about availability. Requires more study.

- Fuel diversity may be a problem, but it's not ours to solve. FPL is in much worse shape. We should not take the lead in fixing the state.

- Emissions analysis reinforces combined-cycle decision. It only helps evaluate one coal technology vs. another if coal is economic. Nuclear is obviously advantaged, but not a player in 2013.

- Tax incentives and/or clean coal money are either dead or not worth the effort. Bush's FutureGen project (\$1 billion for a 275 MW plant) will be a demo project and not really appropriate to meet a defined need.

I welcome your comments and suggestions.

Solid Fuels Team pres 042604.p...

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Email from Tom Davis Comparing

Coal and Gas

### Bushee, James

From:

Davis, Tom J.

Sent:

Thursday, June 26, 2003 5:20 PM

To:

Taylor, Lynn E

Subject:

FW: What would gas have to be for coal to come in

fyi

### Thomas J. Davis

System Planning & Operations Department (919) 546-7119 tom.davis@pgnmail.com

-----Original Message-----

From:

Roeder, Dan

Sent: To:

Thursday, June 12, 2003 11:14 AM Jacob, Michael F.; Byrd, Denise

Cc:

Bombien, Rudy; Davis, Tom J.

Subject:

What would gas have to be for coal to come in

I have performed an analysis using the latest version of COMPETE to determine what gas prices would have to be before we saw coal coming into the resource plan (as you will see in the spreadsheet below, this analysis was done using a version of the generic costs that are "Interim Florida WINTER 2003\$", whatever that means. Debbie should be able to tell you).

If it takes 6 years to build a coal unit, that makes 2009 the first year it can come into the plan. I set the in-service year to analyze to 2009 (cell C5). Therefore, also, I'm only interested in what happens to gas prices starting in 2009. I set all the years after 2009 to be equal to the previous year's value times (1 + escalation rate), where the escalation rate is specified in cell C40. The 3.29% that is there was determined from the last five years of the forecast that was input into COMPETE (I'm not sure how old it is or where it came from--you can make the escalation rate anything you want, and then re-run the analysis).

Doing all this allows you to run a Goal Seek in Excel that will tell you what the gas price in 2009 has to be such that coal and combined cycle have the same busbar cost at a given capacity factor (I chose 60%; you can change that also). The answer I got was gas has to be \$5.539/mmBtu in 2009. What it has to be now and escalating at what escalation rate to get you to that price in 2009 you can figure yourself.

If you want to change some assumptions and re-run the Goal Seek, you can. In case you haven't run Goal Seek before, it's under the Tools menu. If you do Tools/Goal Seek... you will get a dialog box. to perform my analysis (described above) I set the items to (you don't type the quotes):

set cell "G132" (60% CF for CC) to "470.2" (AFBC cost at 60% CF) by changing cell "C25" (gas price in 2009) Click Ok and in the blink of an eye, you will get your answer. Viola!

If you want to change the in-service year, you will have to use a different "by changing cell" reference, but then you could probably figure that out yourself.

I hope this helps. Hopefully this (or something like it) can be used to answer TYSP supplemental data requests and Mitch Perry's questions. Have fun!

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COMPANY/ PEF Rebuttal/E WITNESS From Davis to DATE:

DOCUMENT NUMBER-DATE

ail dated 6-26-03

05396 JUN-38

--Dan

### Dan Roeder

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