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1	FLORID	BEFORE THE A PUBLIC SERVICE COMMISSION		
2		DOCKET NO. 060658-EI		
3	To the Metter of	Bookbi No. Goode Ba		
4	In the Matter of:			
5	PETITION ON BEHALF (STATE OF FLORIDA TO	REQUIRE PROGRESS		
6	ENERGY FLORIDA, INC \$143 MILLION.	. TO REFUND CUSTOMERS		
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16	PROCEEDINGS:	HEARING		
17	BEFORE:	CHAIRMAN LISA POLAK EDGAR COMMISSIONER MATTHEW M. CARTER, II		
18		COMMISSIONER MATTHEW M. CARTER, IT		
19	DATE:	Monday, April 2, 2007		
20	TIME:	Commenced at 10:00 a.m.		
21	PLACE:	Betty Easley Conference Center Room 148		
22		4075 Esplanade Way Tallahassee, Florida		
23	DIDODEED DV			
24	REPORTED BY:	LINDA BOLES, CRR, RPR Official FPSC Reporter (850) 413-6734		
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FLORIDA PUBLIC SERVICE COMMISSION

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PROCEEDINGS

CHAIRMAN EDGAR: Good morning. Call this hearing to order, and we'll begin by asking staff to read the notice.

MS. BENNETT: By notice given in the Florida

Administrative Weekly and by mail this docket, Number 060658,

In Re: Petition on behalf of the Citizens of the State of

Florida to require Progress Energy Florida, Inc., to refund

customers \$143 million, has been set for this day, time and

place.

CHAIRMAN EDGAR: Thank you, Ms. Bennett.

Let's go ahead and take appearances, to my left.

MR. TWOMEY: Mike Twomey, Madam Chair, Commissioners, good morning, on behalf of AARP Florida.

CHAIRMAN EDGAR: Thank you.

MR. McWHIRTER: Madam Chairman, John McWhirter. I'd like to announce this morning a name change in our law firm.

Beginning today the name will be McWhirter, Davidson & McLean.

And I'd also like to announce the nonappearance of our new firm member whose full name is Harold McLean, the former Public Counsel, and he will be with the firm but he will not be participating in this case since he's already done enough.

CHAIRMAN EDGAR: I'm not even going to go there. Thank you, Mr. McWhirter.

MR. BREW: Madam Chairman, good morning. My name is James Brew. I'm here for PCS Phosphate - White Springs. I'm

with the firm of Brickfield, Burchette, Ritts & Stone.

CHAIRMAN EDGAR: Thank you.

1.0

MS. BRADLEY: Cecelia Bradley, Office of the Attorney General, in support of Office of Public Counsel and the citizens of Florida.

CHAIRMAN EDGAR: Thank you.

MR. McGLOTHLIN: Joe McGlothlin and Steve Burgess for the citizens of the State of Florida.

CHAIRMAN EDGAR: Thank you.

MR. BURNETT: Good morning, Commissioners. Before appearances I briefly wanted to introduce our company representatives today: Mr. Vinny Dolan, our Vice President of Regulatory Affairs; Mr. Alex Glenn, our General Counsel for Florida; Mr. Paul Lewis, our Director of Regulatory Affairs. I'm John Burnett on behalf of Progress Energy Florida, and to my right, Mike Walls and Dianne Triplett with the law firm of Carlton Fields.

CHAIRMAN EDGAR: Thank you.

And staff.

MS. BENNETT: And on behalf of staff, Lisa Bennett, Lorena Holley and Keino Young.

CHAIRMAN EDGAR: Thank you. And I note for the record that FPL, FPUC, TECO and FRF were all granted inactive party status and have been excused from participating in this hearing.

Ms. Bennett, preliminary matters.

2.1

MS. BENNETT: There is a proposed stipulation. The parties have agreed upon the following stipulation. The appropriate methodology for calculating the interest related to any overpayment shall be the methodology set forth in the prefiled direct testimony of Progress Energy Florida, Inc.'s, witness Lori J. Cross and associated prefiled direct exhibits. Section 10, Page 41 of the prehearing order so reflects that, and we recommend that at this time the proposed stipulation be approved.

CHAIRMAN EDGAR: Commissioners, staff has recommended that for clarity of the record that we take a vote on that stipulation. Before I call for that, are there any questions on the proposed stipulation? No? Okay.

Commissioner Carter, how about a motion?

COMMISSIONER CARTER: Move staff.

COMMISSIONER McMURRIAN: Second.

CHAIRMAN EDGAR: Okay. All in favor of adopting the proposed stipulation as read by Ms. Bennett, say aye.

(Unanimous affirmative vote.)

Opposed? Show it adopted. Thank you.

Okay. Also note for the record that Progress witness Ms. Cross and OPC witness Ms. Merchant have been excused from the hearing. We will take up their testimony and exhibits when we come to their names in the order of witnesses as reflected

in the prehearing order. And I also note that Progress witness Heller will be taken up out of order and we will look to hear from him on Wednesday. And let's look at the composite exhibit, Ms. Bennett.

MS. BENNETT: I would like to refer everyone's attention to the comprehensive exhibit list. Exhibit 1 on the list is the list itself, and Exhibit 2 is staff's composite exhibit. No objection to the entry of staff's composite exhibit has been noted to staff's knowledge, and we would recommend that Exhibits 1 and 2 be moved into the record.

CHAIRMAN EDGAR: Thank you. Any additions, changes, questions from any of the parties regarding the proposed composite and comprehensive exhibits? Okay. The exhibits will be so marked and will be entered into the record.

(Exhibits 1 and 2 marked for identification.)
(Exhibits 1 and 2 admitted into the record.)

MS. BENNETT: We recommend that the testimony and prefiled exhibits be moved into the record in turn as each witness is called at the hearing.

CHAIRMAN EDGAR: Yes.

MS. BENNETT: No other matters.

Ms. Bennett, any other matters?

CHAIRMAN EDGAR: Okay. Are we ready to move to opening statements? I note that the time periods are done a little differently than we usually do, so I will be keeping

track of time. As per the prehearing order, 15 minutes each for Progress and OPC, two minutes for AARP and White Springs, five minutes for the Attorney General's Office and five and a half minutes for FIPUG. Everybody prepared for that? Yes. Okay.

Mr. McGlothlin.

2.0

MR. McGLOTHLIN: Good morning. Joe McGlothlin,
Associate Public Counsel. During my opening statement I will
be referring to two documents which are exhibits of Mr. Sansom.
The first is already displayed on the screen above you, and I
believe you have it in front of you as well.

Commissioners, soon after the Florida Public Service
Commission overhauled the fuel cost recovery mechanism and
allowed utilities to begin using projections instead of
historical costs so that they would enjoy the benefit of
current recovery of fuel costs, that is to say collection of
fuel costs from the customers in the same time frame those
costs were incurred, soon after that overhaul the Commission
also issued several landmark orders in which it fleshed out the
precepts which would attend this different mechanism. And I
have distilled some of those precepts that formed the overall
paradigm to begin this outline.

First of all, the Commission made clear that while projections can be used, proof of prudence nonetheless is required, and that proof of prudence is analogous to the type

of proof and burden of proof that the utilities face in base rate proceedings.

Secondly, because fuel transactions are complex, necessarily proof of prudence in that area will also be complex.

Third, the burden of proof is on the requesting utility.

Fourth, the information necessary to prove prudence is wholly within the possession of the utility.

Next, a utility that chooses not to present all facts necessary to the final adjudication of prudence is exposed to a level of uncertainty, that uncertainty being the possibility that facts may come to light subsequently that would form the basis for a disallowance.

Next, the Commission made clear that it rejected any suggestion that it be limited by an arbitrary time frame to the consideration of relevant facts when they are presented.

And, finally, the Commission said, and this is a near quote, the ratepayers are entitled to consideration in all ratemaking proceedings.

Those are the precepts that form the overall paradigm that attends the fuel cost recovery mechanism and they are not simply abstract or theoretical in nature. At the appropriate point in time in the proceeding, OPC will sponsor the testimony of Todd Bohrmann, who at the time he was with the Commission

was the PSC's point person for technical evaluation of fuel cost submissions. And he will testify that in practice, in real world implementation the mechanism worked exactly as the Commission laid it out in these orders.

1.8

I make this my starting point because I wanted to make it clear that the petition which initiated this proceeding was not made of whole cloth. Rather, our petition invokes the very paradigm that the Commission laid out in those early orders. And we acknowledge that the question before the Commission is not so much one of jurisdiction. The jurisdiction has been reserved in those orders. The question is: Do the facts and circumstances presented to you in this case warrant the relief that we request? And we will contend that once you hear the evidence, you will agree that a disallowance or a refund is called for.

We intend to show that the evidence which has been presented over time by the utility goes to the amount spent and does not go to the evaluation of alternatives available, does not go to an explanation of why cheaper sources were not used.

The evidence will show at a very early point in time, the late '70s, the utility conceived Crystal River Units 4 and 5 to have two defining properties. First of all, the utility specified to those who were going to design and build the unit, we want coal-fired units specifically designed to burn a blend containing 50 percent western sub-bituminous coal such as that

found in the Powder River Basin and 50 percent eastern
bituminous coal. That is the design basis fuel. Go design and
build a unit with the assumption that's what we're going to
burn in it.

Secondly, they said, we also want a unit that will be capable of operating at the maximum safe steam pressure, boiler steam pressure at all hours without limitation. And Black & Veatch and its contractors such as Babcock & Wilcox designed such units, and the utility brought its proposal to build that unit to the Power Plant Siting Board in the '78, '79 time frame. And during the proceeding the evidence will show that the utility touted the flexibility it had built into the design of the units; we intend to use a 50/50 basis, but we have these various sources of coal and that is an advantage to the design of these units. And the siting board responded with conditions of certification that allowed for the use of this 50/50 blend. That was in the '78/'79 time frame.

During the '80s and the early '90s after the units came in service the utility fueled the units with 100 percent bituminous coal. And in approximately that same time frame the parent company organized a series of affiliate companies who owned coal mines in the Appalachian states, who owned barges on the Ohio and Mississippi Rivers, and who owned river terminals, and during this period of time the utility fueled Crystal River 4 and 5 with bituminous coal in many instances purchased from

and transported by affiliated companies. And we have no quarrel with that period of time because bituminous coal was more economical than the alternative of sub-bituminous coal until the early 1990s when a seismic shift in the economics of Powder River Basin coal and Eastern Appalachian coal took Because as a result of the discovery of higher Btu coal and also because of the advent of rail-on-rail competition, beginning in the early 1990s sub-bituminous coal became the more economical choice. And I'm talking about apples to apples here. Btu to Btu delivered sub-bituminous coal from Powder River Basin became more economical, and as a result Georgia Power, Alabama Power, TVA, Mississippi Power and TECO began shifting to burn Powder River Basin coal instead of bituminous coal. Sometimes they would go as far as 100 percent Powder River Basin because they realized the more they burned, the more they saved on the customers' fuel costs. Sometimes they converted units that were not originally intended to burn the coals because they realized the savings were there.

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Now in the face of this wave of activity what did
Progress Energy do? And I'm talking about Progress Energy
including its predecessor. The evidence will show that not
only did the utility not participate in this move to Powder
River Basin coal, in 1996 it applied for a new federal permit
in a way that was, had the effect of precluding its ability to
use the very coal the units were designed to burn. And here

I'm mentioning something that came to light much later.

Anyway, between the years 1996 and 2005, while the other utilities were taking advantage of this new economical alternative, Progress Energy continued to burn bituminous products many times purchased from affiliated companies and transported by affiliated companies. And at some point in time

they included what is called synfuel, which is also purchased

8 | from affiliates in the business of producing synfuel.

To this point I've been talking about things more or less in chronological order, but now I want to go in reverse chronological order and explain why we bring this to you now and what is the significance of this particular time frame.

I've heard counsel for the utility claim more than once that we got involved in this as a result of their decision to evaluate Powder River Basin coal in 2004. That's incorrect. We first retained a consultant, Bob Sansom, to review and evaluate prices paid by the utility in the 2005/2006 time frame. And in the course of that, we had occasion to see some of the bids submitted in response to a 2004 RFP, and Mr. Sansom realized that the lowest bids to that RFP were rejected by the utility. They were bids placed by producers of Powder River Basin coal. And so once we raised that, the response of the utility was, well, we rejected them because we're not authorized to burn that coal by the terms of our environmental permits. Which if one stops there, it is certainly plausible

enough; you can't burn coal that you're not permitted to use. But in researching the matter further, we discovered that they can't burn the coal because they authored a permit application that had the effect of precluding that ability. So the significance of the 1996 is this: In the same year that represents the latest point in time, reasonably the latest point in time in which the utility should have begun to participate in this move to the more economical coal is the same year in which they took an affirmative step designed to preclude their ability to use it. And that's why we pegged 1996 as the first year of the review period.

But I want to make this point, and I would have some help in making a change from the, from the bar chart that shows the explosion of the production of PRB coal over time. This second chart will preview the results of Mr. Sansom's analysis of the difference in what the utility paid for fuel over time and what they should have paid. And I want to make this point, we pegged the year 1996 as the appropriate starting point, but the biggest hits are in the latter years. For instance, in 2005 alone, standing alone, 2005 only, the difference between the fuel burned and what should have been burned had they been taking advantage of PRB coal and using the 50/50 blend that the units were designed to burn was \$29 million. For 2004, standing alone, \$21 million. For 2003, standing alone, \$15 million. So while we think the ten-year period is

appropriate for the reasons I mentioned, we don't regard this as all or, all or nothing. If the Commission decides in its discretion that there's some different point in time that is more appropriate, then we have provided the analysis that goes in that direction on a year-by-year basis.

1.5

For the three-year period, and I mention three years because it happens to coincide with the period of time that was affirmed by the Supreme Court in the Gulf Power Maxine Mine case, that would be \$66.3 million. Beginning with the year 2000, which happens to be the year in which PEF's own vice president in charge of the fuel procurement predicted they would be using PRB coal, that's \$111 million. So that is the spread of the impact on a year-to-year basis that you have before you.

raised. Some of them, we think you will see based on common sense alone, will fall with their own weight. For instance, the utility has raised the possibility that because of the proximity of the nuclear unit there may be hardships in using PRB coal, but Crystal River 3 was in, in place and nuclear at the time when this, when these units were designed. Crystal River 3 was in place and nuclear in 2006 when the utility finally applied for a permit that would allow it to burn Powder River Basin coal. So apparently it's only this period of time,

'96 to 2005, when Crystal River 3 seems to be a problem, and we suggest it's for purposes of litigation only.

They also raise the possibility of a derating if the blend were to be burned. Bear in mind that Black & Veatch and Babcock & Wilcox designed and built the unit. The evidence will show that in the 2005 time frame the utility engaged a consulting engineer, Sargent & Lundy, to evaluate the suitability of the units, and that came out very positive. But in this case you won't hear from Black & Veatch or Babcock & Wilcox or Sargent & Lundy or the utility's own internal strategic engineering department, all of whom have favorable things to say about the suitability and some of whom predicted savings with the use of Powder River Basin coal.

Instead, you'll hear from a Mr. Rod Hatt, who during his testimony bases his prediction of derates not on any engineering criteria but on what we will demonstrate will be misinformation and supposition on his part. The biggest misinformation is the notion that at the time these units were being designed not enough was known about Powder River Basin coal to design units capable of burning them.

We will present the testimony of Mr. Joseph Barsin, who performed much of the research in the '70s that disproves this, this notion. He also was head of power production for Babcock & Wilcox when these units were built and has first-hand information about the suitability and capability of those

units.

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With respect to some of the policy implications, the utility has suggested that -- well, they've brought out the overall argument of unfairness. But I want to make the point that the possibility of a disallowance has existed since the Commission issued its orders in the early 1980s, and the utilities always have the ability to avoid uncertainty by presenting full comprehensive evidence of prudence so that the Commission can evaluate whether they've done a good job or not. In this case, for instance, the utility was free to have come in and say, we, we intend to file an application for a permit. We don't intend to ask for sub-bituminous coal. Please tell us that was prudent. Or they could have come in and said, yes, these units were designed to burn a blend, 50/50 blend in 1982, but we think we'll wait until 2004 before testing that in the, in the units. Well, as we -- as I talk about it, maybe I now understand why they didn't put on the full-blown case.

It's also been suggested that the Commission should put the utility on notice before it even entertains a disallowance, and my response to that is that takes the word "review" out of prudence review. If there's any change to be made, it should not be at the expense of the only mechanism that is in this procedure for protecting customers' interests. If there's any change to be made after this case, not, not in your decision here but afterwards, it should be in the

direction of requiring the utilities to do more and to meet their obligation of presenting comprehensive facts for your consideration before they are authorized to collect without, without the fear of disallowance. Thank you.

CHAIRMAN EDGAR: Thank you, Mr. McGlothlin.

Mr. Twomey, you have two minutes.

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MR. TWOMEY: It took me half of that to get up here.

CHAIRMAN EDGAR: The two minutes begins now.

MR. TWOMEY: Madam Chair, Commissioners, good morning again. Mike Twomey on behalf of AARP and its 2.8 million

Florida members, many of whom are served by Progress Energy.

I'll be brief, as is required by my time allocation.

AARP would first like to say that it appreciates the leadership of the Office of Public Counsel in this case in first recognizing the issue and then later developing the issue through its several witnesses that you'll hear testify here today. AARP fully supports the Office of Public Counsel on all of its positions in this case, to include its fundamental conclusion that Progress Energy purchases bituminous coal and synfuel coal often from affiliates instead of less expensive sub-bituminous coal at the expense of its customers, at the great expense of its customers, which imprudence alone would require a refund by this Commission to the utility's customers.

AARP goes a bit further and asks you to consider,
Commissioners, that if you find that the evidence demonstrated

primarily by the Office, by the Office of Public Counsel's witnesses is sufficient to lead you to believe that the management of Progress Energy intentionally chose to buy more expensive coal from its affiliates to the detriment of its customers, that you should impose a penalty on top of any refunds you order. And AARP's witnesses suggest that it should be in the neighborhood of 10 percent. The theory being that if the company intentionally mismanaged itself to the benefit of the shareholders, to the detriment of its customers, that merely requiring it to give the money back through a refund plus interest, which is just the cost of holding the money, would be insufficient to deter this company and others from this type of behavior in the future. Thank you for your time.

CHAIRMAN EDGAR: Thank you, Mr. Twomey.

Mr. McGlothlin.

2.0

MR. McWHIRTER: McWhirter.

CHAIRMAN EDGAR: I am so sorry, Mr. McWhirter. Yes.

MR. McWHIRTER: It's hard to keep us Scotsmen apart.

CHAIRMAN EDGAR: It's just Monday morning, I think,

but you have five and a half minutes.

MR. McWHIRTER: This case involves a request for a refund over a ten-year period. Implicit in the testimony of the utility as you hear it will be one overriding concept, and that concept is that, wait a minute, customers have had this information for ten years and they haven't done anything about

it, and that's very compelling. But I would suggest to you that there are two systematic or systemic processes in place which justify a complaint of this maturity being brought at this point in time rather than within the short period of time allowed for fuel proceedings, and those two systemic problems are the time constraints in cost recovery mechanisms and the fiduciary responsibility of utility management.

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First I'll deal with cost recovery. The first rate case that was held by this Commission took four years to process and it involved \$7 million. Now base rate cases must be done in a period of eight months by law, and those rate cases have generally involved issues for about \$10 million to as much as \$400 million. Contrast that to the cost recovery proceedings in which five utilities come in and seek to collect \$9 billion in an 80-day period. They file their testimony on the first part of September. The Intervenors must file their testimony three weeks later. But in the meantime they have to evaluate the original testimony, and they're going to find that a lot of that testimony pertaining to fuel cost has been protected through confidentiality so they can't get that. then they have to set a budget for the case, and then they have to go out and hire an expert who must file testimony without having any knowledge of the relevant facts. The only party that can really deal effectively, fortunately, with these cases is the Public Counsel's office that has an ongoing staff and

continually try to ferret out things during the course of the year. Because of the short period of time and because the information is by and large confidential there it can't be handled within the cost recovery normal process.

So let's go to systemic problem number two, and that is the utility holding company. With a utility holding company the management of utilities has a responsibility primarily to the holding company. It has a responsibility whenever possible to buy its fuel and other commodities from an unregulated affiliate of the holding company. And the reason for that is because they try -- there is a need, a fiduciary responsibility to enhance profits for the benefit of the shareholders of the holding company, not the utility. Because of this, the fourth level of fiduciary responsibility is to the customer who they have an obligation to serve. But that customer is also the person that enhances the profits for the company that the primary responsibility of the utility management flow to.

So I would suggest to you it's only rational to have a continuing oversight of fuel matters when you're dealing with prudence because the facts aren't known early on, can't be discovered early on during the process, and only mature as people understand what's going on.

What this will do, if you rule in favor of the consumers in this case, is to bring to the attention of management that their executive compensation is in jeopardy if

the profits that they've booked in prior years due to their operations with their nonaffiliated company are subject to being recalled. Management of the utility will give more consideration to the guaranteed cost recovery that they impose upon the customers through cost recovery processes if you have the -- if they have the obligation and understanding that what may be glossed over in the cost recovery proceedings is always subject to continued scrutiny. And I would suggest to you that using this evaluation, consumers that you are here to protect, the captive consumers of the utilities that provide the profits to those utilities will be far better protected. Thank you.

CHAIRMAN EDGAR: Thank you.

1.4

Mr. Brew, and you have two minutes.

MR. BREW: Good morning. I'll take one of that to move things along. Mr. McWhirter spoke to you about the process in Florida and how compressed it is and how difficult it is to really get to the bottom of things, and I'd like to echo that. But a little bit more broadly, as we go through this, many states that have fuel adjustment clauses conduct subdockets to look at specialized matters where the facts arise for exactly the reasons that Mr. McWhirter addressed. And that's something that when the Commission casts about for its decision in this, I think it should be very comfortable in the way this process has unfolded with the subdocket and taking the time to look at the facts here.

New York state, for example, went back ten years to look at coal costs of a utility in a proceeding very similar to this. There are ongoing subdockets in Indiana now over hedging costs, and a number of things that in the context of annual or semiannual fuel dockets you simply can't get to. So I guess my one statement would be I think the Commission should feel very comfortable with the process that you're employing here to take the time to examine the facts that go forward, that go into the coal purchase decisions.

My second point gets to AARP's position in this case. To the extent that imprudence is not simply a matter of inefficiency but is directed because of affiliate interests or a more conscious decision not to purchase economical coal, that raises a different level of interest from simply inefficient management and requires special Commission attention. Thank you.

CHAIRMAN EDGAR: Thank you.

Ms. Bradley, and you have five minutes.

MS. BRADLEY: And I won't need it, but thank you.

I don't want to belabor everything that's been said, but there's some key points. A lot of the things you're hearing and will be hearing is that we didn't have permits, it wasn't a good coal, it wasn't the most economical. And yet you'll hear witnesses that say, yes, it was the most economical, they did have a permit to burn the coal until they

changed it, their contracts had provisions that allowed for six months notice of changes. So a lot of the things that they're complaining about, it was possible. And while a lot of the other utilities had to make changes in order to burn this sub-bituminous coal when it became the most economic coal blend, Progress already had these changes. They could have burned the coal. And it's not just the witnesses that you're going to be hearing, it's their own engineers, their own people and the reports that were submitted when they were building this plant. You know, they said it's the most economical. They said it will burn sufficiently. They were the people that originally were saying what you're now hearing from the other witnesses. So that's an important thing to keep in mind. And while they say it is not fair to go back this far, well, that's a system we have, you know. It would be a lot easier just to have them build the plant or do what they do and then seek reimbursement, but that's not what we're doing. We're looking back. So we're already in a looking back mode. We have to do that in order that customers be protected as well.

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And what's really not fair is that the customers paid for the plants that would burn this special fuel and yet they never got the benefit of it. And that's why we'd like to see this refund come through for the customers who have paid for it, that they can now receive the benefit that they paid for. Thank you.

CHAIRMAN EDGAR: Thank you.

Mr. Burnett, and you have 15 minutes.

MR. BURNETT: Can you bear with me one second, Commissioner, just to make sure the -- is it ready?

MR. TRIPLETT: Uh-huh.

MR. BURNETT: Good morning. We are here today because OPC asked this Commission to look back over a decade of coal purchases for our Crystal River baseload Units 4 and 5 and evaluate decisions, some of which were made 30 years ago, regarding not only what coal was procured, but how those baseload units were operated over the last ten years. You are being asked now in 2007 to step into the company's management role and tell us what we did for the past decade over those units, to tell us whether that was reasonable and prudent. This should not be the Commission's role, as the evidence in this case will demonstrate.

Our decisions on what coal to buy, how much it costs at these units, what our permits provided have been a matter of public record open to everyone over the last decade. We have told this Commission in fuel docket proceedings each year from 1996 to 2005 what coal we were buying, what it costs, we've answered any questions that have been asked from us in discovery from staff, from OPC and others throughout 14 fuel clause hearings. PFC and PEF have met with staff, with OPC and others on a regular basis during these years to explain what

our coal procurement plans were and what decisions had been made. No one ever raised one single issue about PRB coal for Crystal River 4 and 5, and rightfully so because there was no issue.

Each year billions and billions of fuel cost dollars, money that PEF earns no profit on, are passed on to customers with this Commission's approval. But OPC, the Intervenors and Commission staff would have you believe that not one dollar of those billions has ever been determined to be reasonable and prudent. Despite the fact that PEF and members of the investment community believe that this Commission has ruled on those dollars as being reasonable and prudent, we nevertheless stand ready today to defend our actions and our decisions over the past ten years. Because as the evidence in this case will show, we made reasonable and prudent decisions that saved customers, not cost, saved customers hundreds of millions of dollars from 1996 to 2005.

In this case, it's important to remember that for PEF to carry its burden of prudence we don't have to show that we were right or successful. We have to show that our decisions fell within a reasonable range of actions, a reasonable range of actions based on the information that we had at the time the decisions were made.

Now I could go on for an hour for all the reasons why PEF should win this case, but I don't have an hour. So I'm

going to take the time I do have to focus on the major arguments made by OPC and by staff and others and explain how the evidence in this case will show that they are wrong.

First, you will hear OPC and staff tell you that PEF should have bought different types of coal from 1996 to 2005 over what we did buy. Mr. McGlothlin, with his exhibit, suggested that this is a split the baby case. If you don't like my case for ten years, how about five or how about three? This is not a split the baby case, and let me tell you why: Because Mr. Sansom and Mr. Windham are dead wrong, with all due respect. Their testimony and exhibits are so full of mistakes, omissions and simple fictions that they simply lack credibility. Davis, Pitcher, Weintraub, Heller, PEF witnesses, and Mr. Sansom and Mr. Windham's own cross-examination will show that their cases are fiction and that PEF's case is reality.

For example, if you start with PEF's RFP process, it's undisputed that PEF sent RFPs to a list of bidders which included PRB coal suppliers comprising 80 percent of the PRB market and including foreign coal producers and brokers of all types of coal over this period. It's undisputed that PEF published these RFPs in industry coal publications. Using the same process, PEF issued seven RFPs over the last ten years and it received PRB bids in four of those seven responses. PRB suppliers knew of and responded to PEF's RFPs when they wanted

to do so, and it's pure speculation to suggest by OPC's witnesses or any others that there was some ulterior motive or that PEF called them up and said, don't bid on our RFPs. No evidence of that, and you'll hear that. PEF bought foreign coal when it was offered to it and when it was economical to buy it throughout this entire time period. It never excluded foreign coal or PRB coal from its bid and its evaluations. And in reality PEF cannot buy coal that it's not offered and surprisingly it did not -- unsurprisingly it did not.

Everyone agrees that the way a utility procures coal on the market is through an RFP or through spot purchases, but that's not where OPC starts or where staff starts. They start with after-the-fact delivered coal prices of other utilities and compare them to what PEF -- based on delivered prices that represent different terms and different contracts that were entered into in different times in the market. They ignore what PEF actually received in response to its RFPs and what PEF actually saw on the spot market.

It's further undisputed by everyone in this case, as the evidence will show, that a prudent utility must consider handling, operational and safety issues, and that's how PEF evaluated its coal and PRB coal. Yet OPC and staff ignore this undisputed reality and embrace the fiction in their respective testimonies. For example, Mr. Windham suggests that PEF should have bought coal that we cannot even legally burn in our

plants. This simply lacks credibility.

Second, PRB coal that OPC suggests we should have burned will derate our units, period. OPC's experts who have never run our plants and who are relying on 25-year-old outdated documents will point to phantom guarantees to you in this proceeding that don't exist in reality and tell you that our employees who have run this plant 365 days a week (sic.) for the past 25 years are wrong when they say that they've seen these units derate in real life with coal that's a higher quality than PRB, with a higher Btu content than PRB. They will say that this lousy coal, that's the adjective that OPC's expert uses to describe PRB coal, this lousy coal will work, when our employees who run these plants in real life say it won't. Again, OPC's fiction versus PEF's reality.

The bottom line, Commissioners, is if we lose over 100 megawatts of baseload generating capacity and energy by doing what these experts who don't run our plants say, the financial and operational impacts would be devastating.

Now Mr. McGlothlin, in referring to one of his exhibits, said, I want you to see the explosion of PRB coal. Funny he should mention that. If I could draw your attention to the screen. Absolutely right, Mr. McGlothlin. PRB coal does explode. It's dangerous. OPC's fiction is that these 1970s vintage power plants were perfectly designed to burn PRB coal safely and efficiently, despite the fact that the evidence

in this case will show that many of the types of PRB coal that OPC suggests we should burn wasn't even discovered and mined until 1990. Again, fiction versus reality.

Listen to Mr. Barsin and Mr. Putnam when I cross-examine them, and they tell you all the things that they agree about regarding PRB coal. You will hear that they don't disagree that PRB coal is dangerous and they don't disagree that our plants would have to be modified to deal with it. They just infer that some people may not want to spend as much on safety as our witness Mr. Hatt says, and a few PRB catastrophes, again, his word, catastrophe, are not worth taking all the measures that Mr. Hatt recommends.

The bottom line is OPC experts have never operated our plants, and after spending three hours at our plants and about two weeks of putting their testimony together, they're going to suggest to you that they rather than our employees know what level of risk is acceptable to our company and know what's needed to protect our employees' lives and the safety of our plants. Again, fiction versus 25 years of reality of running this plant.

Point four, CR4 and 5 are one of two coal facilities in this entire country that are collocated with a nuclear plant. No coal plant in the country and, as far as we know, the world that burns PRB coal is located with a nuclear plant. This would be the first of the kind in the world as far as we

know.

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Now apart from the fact that the NRC may require substantial changes to our nuclear operating license and potentially substantial changes to the plant itself if they let us burn PRB coal at all, listen to OPC's witnesses when they tell you that sometimes units that use PRB coal, if it catches on fire in a coal pile, they'll let it burn out. They'll just move it to the side and let it burn out. If you'll look at the screen, PRB coal burning up. We don't have that luxury at CR4 and 5 because there's a nuclear plant there. And if you look on the screen, you'll see the nuclear plant there in blue. This plant would be surrounded by PRB coal, and if that caught on fire, our nuclear unit would be encased in a ring of burning coal.

Five, the evidence in this case will show that PEF reasonably evaluated all costs including PRB and foreign coals based on known prices and transportation proxies in place when they received those bids, taking into account quality and characteristics of that coal. PEF reasonably moved to consider PRB coal blends when it appeared economic to do so, and no one can dispute the fact, again, that these coals carry with them handling and operational and safety issues that must be evaluated just like we did in 2004 and 2005 and as, and as we've continued to do.

There's no dispute too that OPC today has the full

benefit of what occurred over the past ten years and they have hindsight, the beauty of hindsight, 20/20 vision. At best, they just have another opinion, and, at worst, they're Monday morning quarterbacking us with perfect hindsight vision.

To close, AARP has asked you to send a message in this case that certain behavior won't be tolerated. We too ask that this Commission send a message, five of them: Number one, that the PSC in Florida is and has been a reasonable regulator that balances the needs of all stakeholders in the regulatory compact; two, that this Commission will not let the parties and staff sit idly by not raising alleged issues of imprudence until decades later, while billions of dollars in fuel costs are passed on to its customers; three, that utility management will not be second guessed by those with perfect hindsight, 20/20 vision decades after decisions were made; four, that PEF acted reasonably and prudently in its coal purchases from 1996 to 2005; and, five, that this Commission will base its decision on reality and not superficial fiction. Thank you.

CHAIRMAN EDGAR: Thank you. Okay. That concludes the opening statements portion of the hearing. We will go ahead and swear the witnesses, and then I'll make a few comments, then I think we'll take about a five-minute break and then call the first witness. So we will swear the witnesses as a group. If those of you that are here in the room will stand with me and raise your right hand.

(Witnesses collectively sworn.)

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Thank you. Okay. A few brief comments. To state the obvious, we have numerous parties, we have numerous witnesses and we have limited hearing time. I do want to give every party and every witness the time that they need to do the job that they are here to do, but would ask for your cooperation, realizing that we have limited time. And so I would like to ask the parties to make an effort to limit friendly cross. I also recognize that the prehearing order has given ten minutes to some witnesses for summaries and five minutes to other witnesses for summaries. I will, of course, abide by that order, but would ask, again, recognizing limited time, that if the summaries can be, can accomplish what they need to and be of a lesser amount of time, that certainly will be appreciated as well. And I would also ask, since we do have numerous witnesses and are going over a couple of days for this proceeding, the assistance of counsel in making sure that your witnesses have been sworn.

And with that, let's take about -- oh, we'll take ten minutes to stretch. Come back at 11:00, and then we will begin, Mr. McGlothlin, with your first witness. We are on break.

(Recess taken.)

CHAIRMAN EDGAR: We will call this hearing back to order. And, Mr. McGlothlin, your first witness.

1		MR. McGLOTHLIN: Citizens called Robert Sansom.
2		ROBERT L. SANSOM
3	was called	d as a witness on behalf of the Citizens of the State
4	of Florida	a and, having been duly sworn, testified as follows:
5		DIRECT EXAMINATION
6	BY MR. Mc	GLOTHLIN:
7	Q	Mr. Sansom, were you sworn earlier this morning?
8	А	Yes. Is this on?
9	Q	It is now, yes.
LO	A	Did I turn if off? It's on now.
L1	Q	Please state your name and your business address,
L2	sir.	
_3	А	Robert L. Sansom, S-A-N-S-O-M. Business address,
_4	1901 North	n Moore street, Arlington, Virginia.
.5	Q	Mr. Sansom, did you prepare and submit on behalf of
-6	Citizens o	direct testimony in this docket?
-7	A	Yes.
.8	Q	Do you have a copy of that with you?
.9	A	Yes.
20	Q	Do you have any changes or corrections to make at
21	this point	:?
22	А	I made some corrections in my deposition. Do we have
23	to go thro	ough those again or
24	Q	We'll provide the changes of those change sheets.
25		Do you adopt the answers to the questions that are

1	contained	in this document as your testimony here today?
2	А	Yes.
3		MR. McGLOTHLIN: I request that the direct prefiled
4	testimony	be inserted in the record as though read.
5		CHAIRMAN EDGAR: The prefiled testimony will be
6	entered in	nto the record as though read.
7	BY MR. Mc	GLOTHLIN:
8	Q	And did you also prepare exhibits that have been
9	marked pre	eliminarily RS-1 through RS-29 as part of your direct
_0	testimony	?
.1	A	Yes. And incidentally I do have one other change in
_2	my direct	testimony on Page 3, the Line 17, the word
.3	"bitumino	us" should read "sub-bituminous." It should read,
_4	"When PEF	belatedly attempted to move toward sub-bituminous."
.5		MR. McGLOTHLIN: All right, sir.
.6		Chairman Edgar, I'd request that a hearing exhibit
.7	number be	assigned to RS-1 through 29.
.8		CHAIRMAN EDGAR: And those are exhibits now numbered
.9	3 through	31 on the comprehensive exhibit list.
20		(Exhibits 3 through 31 marked for identification.)
21		And we'll take up the exhibits at the end of the
22	testimony.	
23		MR. McGLOTHLIN: Very good.
24		

1		FLORIDA PUBLIC SERVICE COMMISSION
2		DOCKET NO. 060658-EI
3		TESTIMONY OF ROBERT L. SANSOM
4		ON BEHALF OF CITIZENS OF THE STATE OF FLORIDA
5		
6	Q.	Please state your name and business address.
7	A.	My name is Robert L. Sansom. I am President of Energy Ventures Analysis, Inc. My
8		business address is 1901 N. Moore Street, Suite 1200, Arlington, VA 22209.
9		
0	Q.	Please describe your educational and business background.
1	A.	I have about 30 years of experience in coal markets, coal procurement reviews and audits,
12		coal transportation, coal suitability and coal plant environmental controls and emissions.
13		This experience includes knowledge of the procurement practices of electric utilities that
14		burn coal in the generation of electricity. My experience and educational background are
15		summarized at Exhibit (RS-1).
16		
17	Q.	For whom do you appear in this proceeding?
18	A.	I am testifying on behalf of the Office of Public Counsel (OPC).
19		
20	Q.	Please describe the purpose for which OPC engaged you.
21	A.	At first, I was engaged to assist OPC in its evaluation of prices that Progress Energy
22		Florida Inc. paid for coal to fuel its Crystal River coal units for deliveries in 2005 and
23		2006. During the course of that initial work, matters came to light that led OPC to
24		expand the scope of my engagement to include an investigation indications that PEF

imprudently failed to obtain the most economical sources of coal to supply Crystal River Units 4 and 5 during the period 1996-2005. (During part of this period, PEF's predecessor, Florida Power Corporation, was in existence. For the sake of simplicity, I will refer to the predecessor entity and the current utility as PEF). Based on my findings, OPC filed the Petition of August 10, 2006 that is the subject of this proceeding. The purpose of my testimony is to provide the evidentiary basis for the Petition.

- Q. Please summarize your testimony regarding your analysis of PEF's fuel procurement activities during 1996-2005, as they related to Crystal River Units 4 and 5.
- 11 A. In my testimony I will address and support these points:
 - (1) PEF designed and constructed Crystal Units 4 and 5 to have the ability to burn a blend of coals consisting 50% of bituminous coal and 50% of sub-bituminous coals in its boilers.
 - (2) PEF's initial fuel strategy was to provide bituminous coal from the Eastern states and sub-bituminous coal from Western states in equal quantities. However, when the units began commercial operations, PEF burned only bituminous coal in Units 4 and 5. During the early 1980's this practice had no adverse consequences for ratepayers, because bituminous coal was more economical than sub-bituminous coal.
 - (3) However, by the early 1990's developments in the mining and transportation of the coals led to sub-bituminous coal becoming the more economical choice. This information was widely disseminated within the coal and utility markets and industries at the time. Numerous utilities in the Midwest and Southeast shifted from bituminous coal

to sub-bituminous coal to take advantage of the clear opportunity to lower fuel costs that sub-bituminous coal afforded them. The same economic information regarding the availability of sub-bituminous coal from the Powder River Basin area of the West and the relative economics of the two coals that led these utilities to shift to sub-bituminous coal was known, or should have been known, to PEF in the same time frame.

(4) PEF ignored the information on which other utilities had acted. In fact, in 1996 PEF took steps to abandon its authority to burn sub-bituminous coal in Units 4 and 5 by omitting sub-bituminous coal from its application for the newly required federal Title V air permit. For a full decade after it should have shifted to a 50% Powder River Basin (PRB) sub-bituminous coal blend with bituminous coal, PEF continued to burn bituminous coal and a product of bituminous coal treated with oil called synthetic fuel or "synfuel." Frequently PEF purchased these fuels from companies in which its parent, Progress Energy Inc., held ownership interests. During that time frame, sub-bituminous coal was available from the Powder River Basin of Montana and Wyoming at delivered prices via the water route to Crystal River Units 4 and 5 cheaper than either the bituminous coal or the synfuel that PEF purchased.

sub-bituminous

- (5) When PEF belatedly attempted to move towards bituminous coal in 2004, its earlier imprudent decision to omit sub-bituminous coal from its federal environmental permit and its repeated failures to conduct test burns complicated and delayed its ability to do so.
- (6) As a result of its failure to maintain its flexibility under permits, conduct its procurement processes prudently and secure the most economical sources of coal for Crystal River Units 4 and 5, during the period 1996-2005 PEF passed fuel and fuel-

related costs through the fuel cost recovery clause that were excessive by the amount of \$134.5 million. My calculation does not include interest on this amount.

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Q. Please tell us how you have organized your testimony.

I will begin with a brief overview and discussion of the nature and properties of bituminous and sub-bituminous coals, the sources of those coals, and the implications of the differences between them for electric utilities that burn coal. I will then discuss the design and construction of Crystal River Units 4 and 5. Next, I will identify the developments in the mining and transportation of sub-bituminous coal from the Powder River Basin region of the West that profoundly altered the cost relationships between the two coals and affected the economic choices of consumers of coal in the early 1990's. I will show how a move to exploit the dramatic cost advantages of Powder River Basin coal swept the electric industry in the Midwest and Southeast. I will then discuss how, by contrast, PEF ignored these developments, continued to burn fuel that had become more expensive than an available alternative, and even abandoned its ability to acquire and burn Powder River Basin coal. I will provide information that suggests strongly that its motivation for doing so was to contribute to its parent company's overall profitability at the expense of its ratepayers. In the final section, I will discuss the methodology that I applied to calculate the extent of PEF's overcharges, and quantify that amount.

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SECTION I

22 OVERVIEW OF WESTERN AND EASTERN COALS

Q. Please explain the terms "bituminous" and "sub-bituminous" coals.

These terms are used to identify two kinds of coals having different physical properties. In the United States, bituminous coal is found generally in the Appalachian states (lower sulfur) and the Illinois Basin (higher sulfur). Bituminous coal derives its name from the relatively heavy concentration of "bitumen," a hydrocarbon, that it contains. When it is burned, bituminous coal releases approximately 11,500 to 13,000 British thermal units (Btus) of heat per pound of coal. It has a moisture content of approximately 5 to 10%, and its ash content is approximately 10%. Generally, "minable" bituminous coal is found in seams ranging in thickness from 4 to 12 feet. Much of this bituminous coal lies hundreds of feet below the surface, meaning that underground mining must be employed to remove it.

A.

"Sub-bituminous coal" is the term used to identify a type of coal that has a lesser content of bitumen than that of bituminous coal. In the United States, sub-bituminous coal is found in huge deposits in the Powder River Basin area of Montana and Wyoming. Whereas bituminous coal is found in thin seams, in the Powder River Basin sub-bituminous coal occurs in deposits ranging from 30 feet to more than 110 feet thick. Powder River Basin coal lies close to the surface. It is mined by removing the overburden and scooping the coal from the surface. The first sub-bituminous coal that was opened for mining in Wyoming in the late 1960's and early 1970's contained approximately 8,200 to 8,450 Btus per pound of coal. Subsequently, when areas south of that region were opened for mining, deposits containing upwards of 8,800 Btus per pound of coal were discovered.

Sub-bituminous coal has a greater moisture content and lower ash content than its bituminous counterpart. Sub-bituminous coal contains far less sulfur than even "low

1		sulfur" bituminous coal. Sub-bituminous coal typically contains approximately 0.4%
2		sulfur, or roughly half as much as "low sulfur" Appalachian bituminous coal.
3		
4	Q.	Are there any other differences?
5	A.	Yes. The differences in composition cause the two coals to handle differently.
6		Principally, compared to bituminous coal, sub-bituminous coal generates more dust that
7		must be controlled. Also because of its characteristics, it must be stored in stockpiles
8		more carefully than bituminous coals.
9		
10	SEC	ΓΙΟΝ ΙΙ
11	DES	GN OF CRYSTAL RIVER UNITS 4 AND 5
12	Q.	How do electric utilities deal with the differences in the properties of bituminous
13		and sub-bituminous coals?
14	A.	Principally by taking the properties of the coals the units will burn into account when
15		designing the units. In addition, operating and maintenance procedures are tailored to the
16		type of coal that is being burned.
17		
18	Q.	Please provide some examples of how a unit that will burn sub-bituminous coal
19		would be designed differently than one in which the utility's management intends to
20		burn only bituminous coal.
21	A.	The boiler furnace is larger, pulverizers and coal conveyance and storage facilities are
22		sized for more tonnages, and upgraded dust controls are installed.
23		

1	Q.	How would	operating	and mainte	enance	protocols	differ?

2 A. More care is taken with coal handling and storage and more tons are moved.

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4 Q. Were Crystal River Units 4 and 5 designed with a particular kind of coal in mind?

Yes. Crystal River Units 4 and 5 were designed to burn a mixture of the two coals 5 A. 6 containing 50% subbituminous Powder River Basin (PRB) coal. Babcock & Wilcox 7 (B&W) designed the boiler to burn 50% PRB coal and the firm Black & Veatch specified a 50% blend as the design coal for Crystal River Units 4 and 5. (See Exhibit (RS-2.)) 8 9 More precisely, Babcock and Wilcox specified, as the "design basis" coal for Units 4 and 10 5, a blend containing 50% sub-bituminous coal at 8,125 Btu/lb and 50% bituminous coal 11 at 12,450 Btu/lb for an average 10,285 Btu/lb blended coal (see B&W 1978 Exhibit (RS 2)). 12

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Q. What is the significance of the fact that those who designed Units 4 and 5 specified the 50/50 blend as the "design basis" fuel?

16 A. The specification is important because the size of the boiler furnace, its convection
17 passes, pulverizers, coal storage and feed systems, ash handling and disposal systems,
18 and particulate removal systems, were all designed and constructed so as to be able to
19 accommodate this "design coal". In fact, as Exhibit 2 states, Babcock and Wilcox
20 guaranteed that the units' boilers would operate to specifications if the "design basis"
21 coal were burned in the boilers. This means that the units were designed and intended to
22 operate on the 50/50 blend with no adverse effects, and without the necessity of plant

i		modifications. This will take on added significance in the section in which I will address
2		my calculation of overcharges.
3		
4	Q.	Was PEF's initial fuel strategy for Crystal Units 4 and 5 consistent with PEF's
5		design decisions and construction activities??
6	A.	Yes. In 1978 PEF represented to the Department of Environmental Regulation and to
7		the Governor and Cabinet, sitting as the Florida Electrical Power Plant Siting Board, that
8		the Crystal River Units 4 and 5 units would burn 50% Western (PRB) coal delivered by
9		barge to Crystal River and 50% Central Appalachian (bituminous) coal delivered by rail
0		(see Exhibit_(RS-3)). Crystal River 4 began operating in 1982 and Crystal River 5 in
11		1984.
12		
13	Q.	Did PEF indicate at the time that it would blend the two coals at the Crystal River
14		site?
15	A.	Yes. PEF's application for site certification of Crystal River Units 4 and 5 (3/17/80)
16		describes the coal yard as including "a coal blending facility" and states "at the storage
17		area coal will be blended and transferred to the crusher house by covered conveyor".
18		(See Exhibit_(RS- 4), excerpts from Crystal River Units 4 and 5 Site Certification
19		Application by FPC 3/17/80 pp 3-9 to 3-21, 3-81 to 3-88.
20		
21	Q.	Did PEF represent in this document that Wyoming Powder River Basin ("PRB")
22		coal would be 50% of the blend?

1	A.	Yes. In addition, PEF's submittal described, in the air emissions section, the additional
2		dust emissions from PRB subbituminous coal and the controls required. (See
3		Exhibit(RS- 4) p. 3-84.)
4		
5	Q.	In summary, then, the Crystal River Units 4 and 5 facility was designed and built to
6		burn a 50/50 PRB/bituminous coal blend?
7	A.	Yes. The ratepayers have been paying for this capability since units 4 and 5 became part
8		of PEF's rate base in the early 1980's.
9		
0	Q.	Is there other evidence these units are capable of burning PRB coal?
1	A.	Yes. The Crystal River Units 4 and 5 B&W units are "sister units" to the B&W units at
12		Detroit Edison's Belle River two unit plant and at Alabama Power's Miller four unit plant
13		20 miles northwest of Birmingham.
14		
15	Q.	What coals are used at Miller and Belle River?
16	A.	Belle River has always burned 100% PRB coal. Miller Units 4 burned 100% PRB coal in
17		1995, and by 1997 all four Miller units were burning 50% PRB coal.
18		
19	SECT	TION III
20	PRB	COAL PRODUCTION AND TRANSPORTATION DEVELOPMENTS IN THE
21	EAR	LY 1990s
22	Q.	When Crystal River Units 4 and 5 began commercial operations, did PEF follow the
23		fuel strategy that it had outlined to the regulators?

1	A.	No. Beginning with the time the units became operational, PEF has fueled them solely
2		with bituminous coal. In fact, in answers to discovery PEF told OPC that, prior to 2004,
3		PEF had not even tested a blend of sub-bituminous and bituminous coal in the units at
4		any time.
5		
6	Q.	In this proceeding, do you recommend any refunds or adjustments based on PEF's
7		use of bituminous coal exclusively in Crystal River 4 and 5 during the first years of
8		their operation?
9	A.	No. During the early 1980s, the comparative economics were such that the use of
10		bituminous coal exclusively did not adversely impact PEF's ratepayers.
11		
12	Q.	What do you mean by "comparative economics?"
13	A.	When identifying the most economical choice of coals, PEF-or any utility-must take
14		into account the "delivered cost" per unit of heat, usually expressed in units of dollars
15		per million Btus (mmBtus), of each candidate fuel.
16		
17	Q.	What is "delivered cost?"
18	A.	The cost of generating electricity with coal includes—not only the commodity—but the
19		cost of transporting it from the mine to the site of generation. For this reason, in an
20		economic comparison the cost of transportation is added to the cost of the coal itself. The
21		sum is then divided by the heat content of the coal (total Btus) to derive the cost of coal
22		per million Btus for the sake of comparisons.
23		•

1 Q. You refer to the cost of coal per million Btus of heat. Why do you not compare the cost of one ton of bituminous coal, delivered, to the delivered cost of a ton of sub-bituminous coal?

A.

Because of the differences in the amount of heat stored in each coal, a simple ton-to-ton comparison would not be meaningful. A utility is in the business of converting the thermal or heat energy residing in the coal into electrical energy. The heat released by burning coal in the boiler produces steam, which turns a turbine, which drives a generator. In comparing coals, then, one must look to the heat content of each. If one ton of sub-bituminous coal contained precisely the same number of Btus of heat as one ton of bituminous coal, an examination of quantities, tons and \$/ton, would be the appropriate apples-to-apples comparison. However, as I described earlier, a pound of sub-bituminous coal contains fewer Btus than does a pound of bituminous coal. It follows that a utility must burn a greater quantity of sub-bituminous coal to derive the number of needed Btus than if it were burning bituminous coal.

To take the example farther: Assume that the cost of a ton of sub-bituminous coal containing 8,400 Btus per pound of coal is \$50, and the cost of a ton of bituminous coal rated at 12,000 Btus per pound is also \$50. Assume also that the cost of transportation (and any other costs) are identical for the two coals. Clearly, this is not a "tie," because the utility would have to burn more than a ton of sub-bituminous coal—and therefore pay more than \$50—to derive the same number of Btus that it would obtain from a \$50 ton of bituminous coal. Therefore, comparing the price of a pound, or ton, of sub-bituminous coal to a corresponding quantity of bituminous coal would not provide a meaningful comparison of the relative costs of producing electricity. Converting each into delivered

costs per million Btus places the two coals on an equal and comparable footing. Note that, as the number of Btus in a given quantity of sub-bituminous coal increases, the cost of sub-bituminous coal per million Btus goes down, and its position in the economic comparison with bituminous coal becomes more favorable.

Q. Why was PRB coal not competitive with Eastern bituminous coal in the 1980s?

- A. I mentioned earlier that the first Wyoming PRB sub-bituminous coal contained about 8200 to 8450 Btus per pound. This placed it at a disadvantage when compared to the alternative of higher Btu bituminous coal, even though the price per ton of commodity was cheaper than Eastern bituminous coal (mining thick deposits from the surface is obviously less expensive than deep underground mining of thin seams).
- In addition, during the early 1980s the Burlington Northern railroad was the sole means of transporting Powder River Basin coal by rail. In the absence of competition, transportation costs were high. When these considerations were translated into the economic analysis that I have described, for a period of time PRB coal was more expensive for many destinations than bituminous coal on a "delivered" basis,

Q. What, if anything, changed by the early 1990s?

- 18 A. Two developments improved the economics of PRB coal to the Southeast in the early
 19 1990's:
 - 1. The entry of the C&NW as an originating PRB rail carrier in 1985 and the acquisition of the C&NW by the Union Pacific in the early 1990's to constitute a competitive carrier to the Burlington Northern (later the BNSF). The competition applied to the transportation of PRB coal to east of the Mississippi River rail-

destinations and to the Mississippi and Ohio Rivers for transloading at River docks, and "all rail" to a Mobile, Alabama dock that made it available for ocean barge movement to Crystal River Units 4 and 5.

2. The development and expansion in the southern Powder River Basin of Wyoming of so-called high Btu/lb subbituminous coal mines capable of shipping 8,800 Btu/lb Powder River Basin coal. In 1990 the southern PRB mines produced 76 million tons of this higher Btu content PRB coal. By 1997, they increased their production to 212 million tons annually, a phenomenal increase of 136 million tons annually over a period of only seven years. See Exhibit__(RS-5). In 1998 the PRB high Btu/lb "Joint Line" mines (i.e., those mines in locations served by both rail carriers) shipped coal to utilities that averaged 8,736 Btu/lb. This compares to the 8,150 Btu/lb that the designers of Crystal River Units 4 and 5 assumed for PRB coal in the late 1970s. The higher (relative to the design standard) Btu content PRB coal poses an advantage, because fewer tons would have to be purchased, handled and burned to derive the needed Btus.

A.

Q. Have these developments been documented?

Yes. I have attached, as my .Exhibits ____(RS-5) and ____(RS-6), references to several documents that describe these developments in considerable detail. The documents include cover sheets of voluminous studies and reports prepared by or for the Electric Power Research Institute (EPRI), an association of electric utilities, and the Department of Energy/Energy Information Agency. The developments are not subject to dispute.

1	Q.	Were these developments the subject of attention in the electric industry at the time
2		they were occurring??
3	A.	Yes. They were widely reported contemporaneously in the professional and trade press.
4		
5	Q.	What was the price of this 8,800 Btu/lb coal per ton FOB mine in the early 1990s?
6	A.	Less than \$5.00/ton. See Exhibit (RS-7).
7		
8	Q.	What was the cost to transport the coal by rail to the Mississippi River at St. Louis
9		or lower Ohio River in Illinois?
10		
11	A.	\$10 to \$12/ton, including transloading-to-barge charges.
12	Q.	Is there any evidence that the availability and price of the higher Btu content PRB
13		coal were known to utility coal buyers in the early-to-mid 1990s?
14		
15	A.	Yes. Utilities were the only significant buyers of higher Btu content Powder River Basin
16		sub-bituminous coal in that time frame. Please refer to Exhibit (RS-8), a map of the
17		U.S. showing 1996 PRB coal deliveries as a percent of total burn by state of destination.
18		
19	Q.	How did Southeastern electric utilities other than PEF respond to these
20		developments?
21	A.	In the early 1990s, the major Southeastern coal burning utilities engaged in a serious and
22		comprehensive process to examine increased utilization of Powder River Basin coal,
23		conduct test burns, and introduce PRB coal where it was the economic choice. By 1998

1		Alabama Power was burning 6 million tons per year of PRB coal at Miller, Georgia
2		Power was burning 6.2 million tons per year of PRB coal at Scherer 3 and 4, and TVA
3		was burning 3.7 million tons per year at several plants, none of which had been designed
4		to burn PRB coal. TECO burned PRB coal in significant quantities at Gannon beginning
5		in 1996.
6		
7	Q.	Is it important to distinguish between units designed to burn Powder River Basin
8		(either at 100% or in a blend) coal and those designed to burn 100% bituminous
9		coal?
10	A.	Yes, because in this case, Crystal River Units 4 and 5 were designed to burn 50% PRB
11	,	coal. It is simpler to burn PRB coal in a unit designed for it as opposed to using PRB
12		coal in units not designed to burn it.
13		
14	Q.	Have you prepared a table that describes the PRB purchases by Alabama Power,
15		Georgia Power, Mississippi and Gulf Power, and TECO?
16	A.	Yes, see Exhibit (RS-9).
17		
18	Q.	How do the plants listed above receive PRB coal?
19	A.	Scherer, Miller and Daniel receive PRB coal by all-rail; Watson by rail to Mobile and
20		barge to the plant; Gannon PRB coal traveled by BNSF rail to Cook Terminal in southern
21		Illinois on the Ohio River near its confluence with the Mississippi River, then by barge to
22		Electro Coal Terminal and by ocean barge to Gannon.
23		

1	Q.	what were the derivered prices of these coals:
2	A.	They are shown as reported in Exhibit (RS-10). These are substantially lower
3		delivered prices in \$/MMBtu than Central Appalachian (CAPP) coal delivered to other
4		power plants in the vicinity of these plants.
5		
6	Q.	When did Georgia Power test burn PRB coal at Scherer?
7	A.	In 1989, 1990 and 1991 over 2 million tons of PRB coal were burned at Scherer.
8		
9	Q.	When did Georgia Power solicit PRB bids and sign a rail contract and coal supply
10		agreements to supply Scherer with PRB coal?
11	A.	In 1993.
12		
13	Q.	Is this Commission informed about the fuel cost at Scherer?
14	A.	Yes. FP&L owns 75% of Scherer 4 and JEA 25%. Fuel costs to Scherer are reported to
15		the Commission in FP&L's "A" Schedules. In fact, in November 1995 FP&L asked the
16		FPSC to keep this information confidential. In 1996 the Commission rejected FP&L's
17		request.
18		
19	Q.	How was PRB coal blended for Watson?
20	A.	In 1996 Mississippi Power blended test shipments containing 20% PRB coal at McDuffie
21		Terminal and later at Plant Watson. (Coal Week, December 9, 1996, p. 7.) PRB coal
22		was burned in a blend at Watson for three years 1997-1999. It was later displaced by
23		bituminous imported coal. Watson was not designed to use PRB coal.

1		
2	Q.	Were these uses of PRB coal at Scherer, Miller, Daniel, Gannon and Watson
3		economic?
4	A.	Yes. Gulf Power told this Commission in 1996 that PRB coal burns at Daniel resulted in
5		"dramatic savings" (see Coal Week, April 22, 1996); at Miller, the shift to 100% PRB
6		coal in a unit like Crystal River Units 4 and 5 saved millions of dollars and was not
7		accompanied by a derate. (See Coal Week, September 23, 1996, p. 3 at Exhibit
8		(RS-11).)
9		
10	Q.	Were these examples of the successful and economic utilization of PRB coal in the
11		Southeast known generally in the coal and utility industries?
12	A.	News of these uses, test burns, accompanying PSC testimony, and FERC data were
13	•	public and were widely disseminated at the time of the developments in the trade press, in
14		professional publications, and at conferences and technical meetings. In the 1990's
15		these publications included Coal Outlook and Coal Week. Later the publications
16		included Argus Coal Daily and Platt's Coal Trader International, United Power's weekly
17		price sheet, Platt's Coal Outlook, and SNL Energy's Coal Report. Plus, the utilities—
18		including PEF—saw the impact of the economic shifts first hand when they conducted
19		solicitations for offers to supply coal and received bids from producers of PRB coal.
20		
21		Q. During the time frame 1996-2005, did any of the publications that you mentioned
22		provide information on then current market prices of PRB coal and bituminous

coal? If so, how frequently were the market prices reported?

1

A. Yes. During the 1990s, <u>Coal Outlook</u>, for instance, published such market prices weekly. After 2000, the Platt's publication reported such market prices on a daily basis.

Market price information was readily available to the industry at the time.

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SECTION IV

8 RESPONSE OF PEF TO DEVELOPMENTS IN PRB AND BITUMINOUS MARKETS

- 9 Q. Please describe the manner in which PEF structured its means of supplying Crystal
 10 River Units 4 and 5 with coal prior to the advent of economical PRB coal.
- 11 PEF's parent holding company had established prior to 1996 a web of affiliates to mine Α. 12 Central Appalachian (CAPP) bituminous coal, to transload CAPP coal at company owned 13 docks from truck and rail to river barge on the Kanawha, Big Sandy, and Upper Ohio 14 Rivers, to own river barges which moved this coal down the rivers to New Orleans, to transload at New Orleans (IMT) to Gulf barges, which were also partly owned by PEF 15 PEF contracted with its sister company, now called Progress Fuels 16 affiliates. 17 Corporation, to serve as PEF's coal procurement arm. Progress Fuels Corporation owned 18 subsidiaries in the coal mining and transportation businesses. Progress Fuels 19 Corporation's "procurement department", acting as the utility's coal supplier, dealt 20 frequently with Progress Fuels Corporation's marketing division during procurement activities. 21

1	Q.	How did	PEF respond	to the	developments	in the	coal	markets	that	you	described
2		earlier?									

3 PEF ignored the changes. In fact, PEF's actions were worse than that. At the same time A. other utilities were lowering fuel costs by switching to PRB coal, PEF inexplicably, 4 5 unilaterally surrendered its authority under environmental permits to burn PRB coal. 6 PEF continued to purchase bituminous coal, much of which the purchasing arm of its 7 affiliate, Progress Fuels Corporation, bought from the marketing arm of its affiliate, Progress Fuels Corporation, even though PRB coal—and, on certain occasions, imported 8 bituminous coal—were cheaper than the Appalachian bituminous coal and synfuel that 9 PEF burned at Crystal River Units 4 and 5. 10

11

12

Permitting

- Q. Please explain how PEF surrendered its ability to burn PRB coal at Crystal River
 Units 4 and 5.
- Based on PEF's presentation, the Electrical Power Plant Siting Board issued a 15 A. certification order that authorized PEF to burn the 50/50 "design coal" at Crystal River 16 Units 4 and 5. The Board issued the order in 1978, and the plants became operational in 17 the early 1980s. In the mid-1990s, as the result of amendments to federal environmental 18 19 statutes, PEF and other utilities were required to apply for and obtain a new permit, called the "Title V operating permit." When PEF applied for this permit, it omitted sub-20 21 bituminous coal from the fuels for which it asked authority to burn in Crystal River Units 4 and 5. It did this despite the fact that Units 4 and 5 were designed to burn PRB coal, 22

1		despite PEF's initial coal strategy, and despite the wave of utilities responding to changed
2		economics of coal procurement by shifting to PRB coal.
3		
4	Q.	What reason did PEF give for omitting sub-bituminous coal from the application
5		for its Title V permit?
6	A.	In an answer to one of OPC's interrogatories, PEF said that at the time it did not
7		contemplate the burning of sub-bituminous coal. See Exhibit (RS-29).
8		
9	Q.	Do you find this explanation satisfactory?
10	A.	No. It was folly for PEF to abandon its authority to use the capability designed into the
11		units. This would have been the case even if preserving the ability was needed only to
12		prepare for future contingencies. The wealth of available information regarding the
13	•	developments in the coal markets makes the omission incomprehensible.
14		
15	Q.	Was PEF, through its affiliate, soliciting PRB coal for Crystal River Units 4 and 5
16	•	during the period 1995 to 2004?
17	A.	Yes. I am aware that PEF, through the affiliate whom PEF contracted to purchase coal
18		for Crystal River Units 4 and 5, solicited PRB coal in 1995, 1998, 2001, 2003 and 2004.
19		
20	Q.	Why?
21	A.	Apparently because the fuel procurement personnel realized Crystal River Units 4 and 5
22		was physically capable of burning PRB coal and because the fuel procurement personnel
23		did not become aware of the omission of sub-bituminous coal from the Title V permit

1		until after they had ordered a quantity of PRB coal for a test burn in 2004. In other
2		words, the left hand did not know what the right hand was doing.
3		
4	Q.	Yet PEF applied for a Title V Air Permit in March of 1996 that excluded PRB coal?
5	A.	Yes, the original application requests a Title V permit for "bituminous" coal only, not
6		subbituminous coal. (See Exhibit (RS-28).)
7		
8	Q.	When was this permit issued?
9	A.	The permit did not become effective until January 1, 2000.
10		
1	Q.	Does this mean under its pre-existing permits, PEF could have purchased PRB coal
12		from 1996-1999 when it was the most economic alternative, notwithstanding the
13		omission in its 1996 application?
14	A.	Yes. I have been informed by Counsel for OPC that this is the case under the
15		environmental agency's applicable rules.
16		
17	Q.	Did CP&L, now Progress Energy Carolina ("CPL"), test burn PRB coal in the
18		1990's?
19	A.	Yes. In February 1997 CP&L hauled PRB coal 2,200 miles by rail. This compares with
20		1,800 miles to Scherer in Georgia. Moreover, unlike Crystal River Units 4 and 5,
21		CP&L's units were not designed to burn PRB coal.
22		
23	Q.	What was the delivered price in 1997 of PRB coal to CP&L?

1	A.	The delivered price was 179.5 ¢/MMBtu to Mayo (one train).
2		
3	Q.	How did these prices compare to Central Appalachian coal to Crystal River Units 4
4		and 5 via International Marine Terminal (IMT), the barge loading facility on the
5		Mississippi River owned by PEF's affiliate, in 1997?
6	A.	CP&L's delivered PRB price was about \$32.00/ton. PEF's delivered 1997 price for
7		Central Appalachian bituminous coal to Crystal River Units 4 and 5 was made up of
8		\$43.44 per ton delivered to IMT and a \$8.27/ton Gulf barge charge for a total of
9		\$51.71/ton.
10		
11	Q.	And you believe PRB coal could be delivered to Crystal River Units 4 and 5 for less
12		than it was to CP&L?
13	A.	Yes, shipments of PRB coal to TECO in Florida and PRB bids to PEF/PFC show this has
14		consistently been the case. (See Exhibit (RS-10).)
15		
16	Q.	Was PRB coal economical for CP&L?
17	A.	No. CP&L is too close to the CAPP coal fields for PRB to be more economic than CAPP
18		coal, especially in units not designed for PRB coal.
19		
20	Q.	Please comment further on the history of PEF's environmental permits for Crystal
21		River units 4 and 5.
22	A.	After applying for a Title V permit limited to "bituminous" coal in March 1996, PEF
23		engaged in a long dispute with FDEP over whether it could burn very high sulfur

petroleum coke in a blend at Crystal River 1/2. At first, FDEP opposed pet coke, but later changed its mind to allow it, but was overruled by U.S. EPA. This dispute was not over until 1999, when PEF withdrew its efforts to add pet coke. However, PEF amended its pending application to request authority to burn "bituminous briquettes", a form of "synthetic fuel" derived from bituminous coal. I will discuss this in more detail later. This request was granted. In 2004, PEF was required to renew its Title V permit. Again, in its application for renewal it did not identify sub-bituminous coal as a potential fuel for Crystal River Units 4 and 5. It is clear, then, that PEF knew and pursued the routine for amending its Title V permit, but chose not to seek to add sub-bituminous coal following its first omission.

- Q. Earlier you testified that PEF sought bids from PRB producers in 1995, 1998, 2001, and 2003, in addition to the 2004 RFP. What is the earliest solicitation by PEF for PRB coal that you have examined?
- A. While OPC asked for documents related to earlier RFPs, at this point the 2003 RFP process is the earliest RFP process for which I received discovery documents. When PEF/PFC evaluated bids received in July 2003, they showed PRB coal was by a wide margin the least expensive Crystal River Units 4 and 5 coal. Colorado bituminous coal was comparable on a delivered price basis to PRB coal. As evaluated by PFC, PRB coal at \$2.02/MMBtu was 33 cents/MMBtu less expensive than Central Appalachian bituminous (CAPP)/synfuels coal and 11 cents/MMBtu less expensive than imported coal. This is not surprising, as such results reflect why utilities had been purchasing PRB coal in large quantities since the early 1990s.

1		
2	Q.	What did PEF do in response to the 2003 results?
3	A.	PEF labeled the PRB bids "FOR TEST PURPOSES ONLY-REVIEW LATER".
4		
5	Q.	That's all?
6	A.	Yes, no test burn was conducted.
7		
8	Q.	Did PEF eventually conduct a PRB test burn?
9	A.	In April 2004, as a result of the March 2004 solicitation and under pressure to reduce
0		water route transportation cost, PEF ordered a quantity of PRB coal for a "test burn".
1		
12	Q.	What happened?
13	A.	While the test was underway, a PEF environmental staffer alerted the plant that PEF's
14		revised Crystal River Units 4 and 5 Title V permit did not allow subbituminous PRB coal
15		to be burned.
16		
17	Q.	So the coal procurement and operational folks did not even realize Crystal River's
8		4/5 air permit did not allow PRB coal to be burned?
19	A.	It is even worse than that. Some PEF personnel involved did not realize Crystal River
20		Units 4 and 5 were designed to burn a 50% PRB blend.
21		
22	Q.	After the test burn was halted, PFC could not take advantage of the economical
23		PRB bids it had received in March 2004?

1 A. That is correct. The failure to have and maintain the PRB burn capability was especially crucial in 2004, when prices of Central Appalachian and imported bituminous coal had jumped but PRB prices had not. (See Exhibit (RS-7).)

4

5

Q. Did PEF try to obtain a permit revision to burn PRB coal?

Yes, but apparently not until after an April 2005 visit by Progress Energy, Inc.'s CEO to 6 A. subsidiary Progress Fuels Corporation's upriver docks (see PE's chronology at Exhibit 7 (RS-12)). In support of its request for renewed authority to burn PRB coal, PEF 8 acquired an analysis of a PRB/Central Appalachian bituminous blend from affiliate 9 Kanawha River Terminals dated June 23, 2005 and offered it to FDEP in February 2006. 10 PEF studied the issue internally in 2005 in studies by Daniel Donochod, of PE's Strategic 11 Engineering Unit, and beginning in the fall of 2005 in studies by the engineering 12 consulting firm of Sargent and Lundy. These studies showed major fuel savings were 13 possible at Crystal River Units 4 and 5 with PRB blends, minor upgrade costs to update 14 Crystal River coal dust controls, and no major capital cost to burn PRB coal at Crystal 15 River Units 4 and 5 in a 50% blend with Central Appalachian bituminous coal. 16 Significant upgrades were indicated to be necessary in a scenario involving the burning 17 of a blend containing 70% PRB and 30% Illinois Basin coal, but this was not what 18 Crystal River Units 4 and 5 was designed to burn. Relevant supporting documents are at 19 Exhibit (RS-12). PE studies dated April 27, 2006, August 22, 2005, and September 20 27, 2005 showed fuel savings of \$48.9 million; over a period of only several years, 21 assuming only a 20% PRB blend. 22

Synfuel

Turning to the next subject that you mentioned when addressing PEF's response to 1 Q. 2 developments in the PRB markets, what are synfuels? Synfuels are a tax-defined coal that, as a result of a federal statute, receives a large tax 3 A. credit through 2007, except when crude oil is above about \$65/bbl. A synfuel is 4 generally a coal that has been chemically altered (on the surface) by a plant placed into 5 service prior to July 1, 1998. Various "reagents" are added to obtain this reaction, which 6 does not alter coal's basic characteristics. 7 8 9 Q. What is the value of synfuels tax credits claimed by Progress Energy, Inc. to date? According to Argus Coal Daily (August 10, 2006, p. 3), the total is \$1.25 billion... 10 A. 11 Did PEF need a permit to burn synfuels at Crystal River Units 4 and 5? 12 Q. Yes. On February 22, 1999 FPC wrote to FDEP as follows: "As you know from 13 A. 14 previous correspondence, Florida Power Corp. (FPC) has been approached by its fuel supplier, Electric Fuels Corp., concerning the possibility of burning "coal briquettes" at 15 its Crystal River plant." (See letter at Exhibit (RS-13).) In context, it is clear that 16 the briquettes are synfuel. 17 18 Was the permit issued? 19 Q. Yes. PEF was permitted at its Crystal River units by FDEP in early 2000 to burn a 20 A. "bituminous coal briquette mixture" defined as: "coal fines combined under heat and 21 pressure with a small amount of oil to form briquettes" (FDEP, June 29, 1999 Public 22

23

Notice.

1

2 Q. Did the additive used by PEF's affiliates to make "synfuels" add sulfur?

A. Yes, according to PEF's permit filing. To avoid an increase in emissions, synfuels burned by PEF at Crystal River Units 4 and 5 had to have as a raw coal feed a lower sulfur content coal than PFC/EFC previously specified for Crystal River Units 4 and 5.

This increased the cost of the raw coal product. (See PEF-FUEL-004750 a 9/2/03 note

regarding July 2, 2003 procurement and PEF documents filed with FDEP.)

8

9

10

7

Q. But didn't synfuel bidders give a discount over the CAPP price in order to take the tax credit?

Yes, but this was of no benefit to Florida ratepayers, who, taking into account the price at 11 A. which PEF purchased synfuel, had less expensive options for coal delivered to Crystal 12 River 4 and 5 through IMT, such as PRB and imports; besides, synfuels purchased from 13 14 PEF affiliates were more costly than Central Appalachian bituminous coal by rail to Crystal River Units 4 and 5. Moreover, the July 2003 solicitation results suggest in 15 16 PEF's case Progress Fuels Corporation's conflict of interest as a buyer for PEF and purchaser of synfuel from its affiliates denied even this small discount to PEF's 17 18 ratepayers.

19

20

Q. Please recap your discussion of the permit history.

21 A. PEF let its PRB permit lapse, and did not seek to rectify its omission, but when a non-22 regulated affiliate sought tax breaks for Progress Energy, Inc. at the expense of PEF's 23 ratepayers, PEF quickly acquired a synfuels permit. PEF moved quickly to help its

1		affiliate get two breaks for its parent, Progress Energy, but it took from 1993 to 2006 for
2		PEF to prepare to burn the economical PRB coal for which Crystal River Units 4 and 5
3		were designed. (See Exhibit (RS-13).)
4		
5	Q.	What quantity of synfuel did PEF purchase during the period 2000-2005?
6	A.	These amounts are shown in Exhibits (RS-14) and (RS-15).
7		
8	Q.	Were PEF's ratepayers injured by PEF's purchase of synfuels instead of PRB coal?
9	A.	Yes. During the several years when PEF was buying and burning synfuel, Powder River
10		Basin sub-bituminous coal was available at delivered costs lower than those incurred by
11		PEF to obtain synfuel.
12		
13	Q.	On what do you base that statement?
14	A.	As I will develop in more detail in the following section, PEF reported the actual delivered
15		cost of the synfuel it purchased to the FERC and to the FPSC. I base the statement on a
16		comparison of those actual costs to the costs of the alternatives that were known at the
17		time.
18		
19	Q.	Doesn't PEF deny the synfuels shipments to Crystal River Units 4 and 5 via IMT
20		were purchased from affiliates?
21	A.	No. PEF denies that synfuels <u>purchased</u> from affiliates were <u>produced</u> by affiliates. The
22		synfuel was produced by partnerships in which companies owned by Progress Energy,

1		Inc. held ownership positions, which holdings were apparently designed to avoid the
2		categorization of "affiliate." (See Exhibit (RS-16).)
3		
4	Q.	What were the arrangements?
5	A.	PE maintained a complex web of synfuel producing companies with facilities at
6		EFC/PFC docks on the Kanawha (Marmet and Quincy), Upper Ohio (Ceredo), and Big
7		Sandy (Big Sandy) rivers. At Exhibit (14(b)) is PEF's summary of the synfuels
8		"Producing Companies" and "Marketing Agent Companies" that constituted the vendors
9		of synfuels to the Crystal River plant, mostly to Crystal River Units 4 and 5 via IMT.
10		
11	Q.	How were these deliveries reported to FERC and to the FPSC?
12	A.	See Exhibit (RS-14(c)) for example reports.
13		
14	Q.	What were the "agent" sales companies?
15	A.	Black Hawk Synfuels, Sandy River Synfuels LLC, Kanawha River Terminal, Riverside
16		Synfuel, Progress Fuels, and Marmet Synfuel.
17		
18	Q.	What were the synfuel producing companies?
19	A.	New River Synfuel LLC, Sandy River Synfuel LLC, Colla Synfuel, Imperial Synfuel,
20		and RC Synfuel.
21		
22	Q.	What percentage of Central Appalachia bituminous (CAPP)/synfuels deliveries to
23		IMT for Crystal River Units 4 and 5 were PEF "affiliate" shipments?

1	A.	As a percent of CAPP bituminous coal/synfuels delivered to IMT for Crystal River Units
2		4 and 5, PEF affiliates garnered 53% of these sales in 2000, 88% in 2001, 99% in 2002,
3		78% in 2003, 75% in 2004, and 36% in 2005. See Exhibit (RS-14).
4		
5	Q.	What was the tax benefit per ton of synfuel?
6	A.	About \$27/ton in 2003.
7		
8	Q.	Did PEF affiliates submit winning bids in response to solicitations to ship
9		coal/synfuel to Crystal River Units 4 and 5 via IMT?
10	A.	PEF (and Progress Fuels Corporation) awarded contracts to affiliate synfuel bidders, but
11		synfuel bidders were not the most economical alternatives.
12		
13	Q.	Please explain.
14	A.	First, it is clear that PEF had less expensive options for Crystal River Units 4 and 5 coal
15		than synfuels from Progress Fuels Corporation's docks at Marmet, Quincy Ceredo and
16		Big Sandy. These options were PRB coal; western bituminous coal; imported coal; and
17		Central Appalachian bituminous coal by rail direct to Crystal River Units 4 and 5
18		(through 2004). PEF/PFC set up the bids and tonnage allocations to carve out most of the
19		water route tons via IMT for its related companies to produce as synfuels and ship via its
20		affiliate river docks and affiliate river and Gulf barges and IMT port system to Crystal
21		River Units 4 and 5. PEF/PFC solicitations excluded the more cost effective options.
22		This was imprudent.
23		

1	Q.	But didn't Progress Fuels Corporation's predecessor entity, EFC, sell its MEMCO
2		barge company and its share of IMT in 2001?
3	A.	Yes, but the sale was with contracts with Progress Fuels Corporation to move this coal
4		that did not expire until 2004, thus enhancing the value of the 2001 sale at the expense of
5		the ratepayer. And the incentive PEF affiliates have to move synfuels from their upriver
6		docks continues to this day. The synfuel tax credit does not expire until the end of 2007
7		and PEF has a large investment in the up river docks.
8		
9	Q.	Do you have additional observations regarding the manner in which synfuel
10		prevailed in solicitations conducted by PEF and Progress Fuels Corporation?
11	A.	Yes. There is the question of whether, even limiting solicitations to water route, Central
12		Appalachian bituminous/synfuel coal to Crystal River Units 4 and 5, PEF's affiliates won
13		the bids among these limited bidders fairly. My answer is PEF gave its synfuel affiliates
14		special treatment.
15		
16	Q.	On what do you base this statement??
17	A.	First, it is statistically impossible in a market as large as Central Appalachian bituminous
18		coals for a supplier to garner in an open sealed bid market the proportions, which were
19		achieved by PEF affiliates, of the CAPP/synfuels tons to IMT for Crystal River Units 4
20		and 5.
21		
22	Q.	What do the details of the solicitation process show?

A. They show PEF/PFC segregated bids for Crystal River Units 4 and 5 between water route and rail route bids. Water route bids were further segregated between CAPP/synfuels which were transported and transloaded via affiliates (or ex-affiliates with legacy contracts), and imported coal which usually moved to IMT but occasionally to McDuffie Terminal in Mobile. An example of favoritism occurred in July 2003. Documents obtained from PEF reveal the low bidder, a non synfuel, CAPP coal bidder, offered more coal than PFC wanted to buy, yet PFC did not act promptly to buy the coal. PFC, instead offered to buy from its related company, Black Hawk Fuels, and offered ("Al" Pitcher to "Joe" Jefferson) tons to Black Hawk at a stipulated price which was not the price that Black Hawk had bid. Black Hawk replied it did not have a firm supply of coal! Black Hawk, which had supposedly provided a firm July 2, 2003 bid for 2004 and 2005 coal, then claimed it had located the coal, but at a higher price than it originally had bid. See Exhibits ____ (RS-14(b)) and ____ (RS-14(c)).

Q. Do you have additional concerns?

16 A. Yes. EFC-PFC had a conflict of interest. PFC was supposedly buying coal for PEF at
17 least cost to the ratepayer. Yet PFC's synfuels plants at its docks needed to purchase the
18 same fuel to generate profits (tax benefits) for its parent Progress Energy

Q. Was this purchasing behavior imprudent? If so, how?

A. From the standpoint of PEF's ratepayers, it was imprudent. First, there was an obvious conflict of interest at PFC. Second, any bid like Black Hawk's not backed by a firm coal supply should be rejected. The lack of a firm supply at the time of bid is a

disqualification. (This is different than a bid provided "contingent on prior sale," which is an acceptable practice.) Third, it is highly irregular to have "Al" to "Joe" affiliate negotiations and offers and counter offers that are not formalized and communicated to the other short list bidders, because presumably they <u>had</u> a committed coal supply. Fourth, in this case, since ultimately no July-September transaction was consummated, the ratepayer incurred damages because the coal had to be purchased in 2004 at higher prices. It is even possible, given the structure of PEF's affiliates, that a non-regulated PEF affiliate synfuel plant was the "prior" purchaser of the low July 2003 bid for Central Appalachian coal offered by Infinity Coal Sales/Panther Mining. My proposed adjustments would remedy the cost to the ratepayer of these abuses, but only through 2005.

- Q. What was the coal/synfuel/import mix by the water route to Crystal River Units 4 and 5?
- 15 A. These data are at Exhibit ____ (RS-15).

17 Q. What do the data tell us?

18 A. Up until 2000, most Crystal River 4 and 5 coal delivered via IMT was non-affiliate
19 Central Appalachian bituminous coal moved by PEF's affiliate company, Progress Fuels
20 Corporation ("PFC"). PFC owned and operated a barge/dock network. PFC also owned
21 and operated coal mining companies. PFC-produced coal shipped to IMT for Crystal
22 River Units 4 and 5 was about 25% of receipts. Only after January 1, 2000 were Crystal
23 River Units 4 and 5 permitted to burn affiliate synfuels (but not PRB, because PEF

imprudently let its ability to burn PRB coal in Crystal River Units 4 and 5, lapse). After
2 2000, PFC affiliate synfuels shipments to IMT 4/5 became the dominant source of
3 coal/synfuels and the most expensive source of coal/synfuels to Crystal River Units 4 and
4 5. See Exhibit ___ (RS-19). This was generally true for 2000-2005. One exception was
5 in 2002, when a very high priced shipment of 111,000 tons of Venezuelan coal arrived at
6 IMT for delivery to Crystal River 4 and 5.

7

8

Imports, The 2004 Water "Cap", And Water Route Economics

- 9 Q. What was the role of imports? Were they economical relative to Central

 10 Appalachian bituminous coal and affiliate synfuels?
- During the period 1996 to 2005, except for 2002, imports were less expensive than CAPP coal and affiliate coal/synfuels shipped to Crystal River Units 4 and 5 by the water route.

 See Exhibit _____ (RS-19). But PEF did not shift to imports earlier, as Southern Company did at its Gulf plants. As was the case with PRB coal, when cheaper imported coal was available it usually lost out to bituminous coal and synfuels produced and transported by PEF's affiliated companies.

17

18

Q. Did PEF eventually increase imports?

19 A. Yes. By 2004 PEF increased its reliance on imported coal for Crystal River Units 4 and 5
20 at IMT from 30% in 2003 to 48% in 2004 and 2005. PEF made economical purchases of
21 imports for 2003 and later years (under earlier contracts), but by August 2003 new import
22 contract and spot prices jumped, making additional purchases very expensive. This
23 development notwithstanding, PEF purchased additional very high-priced imports in

1		September 2004, see Exhibit (RS-18), probably as part of its strategy to minimize the
2		impact of the water route transportation cap agreed to in April 2004.
3		
4	Q.	What did this "cap" have to do with imported coal?
5	A.	In 2003, PEF and parties negotiated a cap to what PEF could charge ratepayers for
6		waterborne transportation of coal during 2004. Prior to the imposition of the cap, PEF
7		had been billing the ratepayers about \$17.33 per ton (2000-2003) and \$19.61/ton in early
8		2004 just to get CAPP coal and synfuels to IMT on the Mississippi, then another
9		\$9.39/ton (in 2003) to move coal/synfuels from IMT across the Gulf to Crystal River
1,0		Units 4 and 5. It was also billing \$5.05/ton to transload imported coal. According to
11		PEF's September 2004 FPSC 423, these rates were changed as a result of the water
12		settlement from \$19.61/ton to \$15.94 or \$10.19/ton; from \$5.05/ton to \$3.74/ton and
13		from \$9.39/ton to \$6.96/ton, respectively. So unless PEF found a way to reduce
14		transportation costs in 2004 it stood to lose money, or at least have its profits fall.
15		
16	Q.	What were PEF's options to reduce water route transport costs?
17	A.	PRB coal was one option, delivered to the Cora, Cahokia or the Cook docks near the
18		confluence of the Ohio and Mississippi Rivers, or to the McDuffie Terminal at Mobile,
19		Alabama. (See Exhibit_(RS-17.))
20		
21	Q.	Did PEF try this?
22	A.	Yes. As I stated earlier, PEF/PFC solicited PRB coal in April 2004 and began to test
23		burn in April 2004, but the procurement personnel at PFC did not realize PEF had failed

1		to maintain a Crystal River Units 4 and 5 air permit to allow it to burn the PRB coal that
2		Crystal River Units 4 and 5 were designed to burn (on a 50% tonnage basis). This coal
3		was by far the least expensive coal via the water route (see Exhibit (RS-19)) and
4		would have carried much lower transportation cost than Central Appalachian/synfuels
5		coal.
6		
7	Q.	When the PRB burn plan was halted by air permit problems, what did PEF do?
8	A.	PEF had two choices: Central Appalachian coal/synfuels or imported coal. But more
9		CAPP coal would have caused PEF to exceed its water route \$/ton transportation cap. So
10		PEF bought imported coal. The imported coal carried a low transportation cost, but the
11		commodity itself was very expensive.
12		
13	Q.	What were the consequences for the ratepayer?
14	A.	On a delivered basis, the coal was very costly—more expensive than alternatives.
15		
16	Q .	How costly?
17	A.	The September 2004 very high priced FOB South America coal purchases of imported
18		coal are shown at Exhibit (RS-18).
19		
20	Q.	Have you provided the actual prices paid by PEF for synfuels and imports for the
21		years 2000-2005 compared these to the PRB prices PEF would have paid had it
22		burned PRB coal at Crystal River Units 4 and 5, purchased via the water route?
23	A.	The results in \$/MMBtu are displayed at Exhibit (RS-19).

1		
2	Q.	Summarize what do these results show?
3	A.	They show:
4		1. PEF synfuels were very costly for ratepayers.
5		2. Imports were less expensive than affiliate coal/synfuels except for 2002, which
6		contains an unexplained high priced shipment of Venezuelan coal.
7		3. Available PRB coal would have saved ratepayers millions of dollars in fuel costs
8		(see later section on excessive fuel charges).
9		4. Central Appalachian coal via the water route was more expensive than Central
10		Appalachian coal via the all rail route.
11		
12	Q.	What were the sources of imports to Crystal River Units 4 and 5 at IMT over 2000-
13		2005?
14	A.	Colombia, Venezuela, Poland, and Russia.
15		
16	Q.	PFC could buy from these countries, but not from Wyoming?
17	A.	Correct.
18		
19	Q.	Please summarize your points regarding PEF's response to developments in the PRB
20		coal markets.
21	A.	In the face of an industry-wide move to cheaper PRB coal, PEF unilaterally surrendered
22		its authority to burn PRB coal. Instead, it purchased demonstrably more expensive

1		bituminous coal and synfuel, unfairly favoring those sources during solicitations in the
2		process. Ratepayers were adversely affected by PEF's behavior.
3		
4	SEC	TION V
5	ECO	NOMIC FUEL CHOICES FOR CRYSTAL RIVER UNITS 4 AND 5 VIA THE
6		WATER ROUTE
7	Q.	How would the revenues and earnings of PEF's affiliates in the mining and
8		transportation businesses have been affected, 1996-1999, had PRB coal displaced
9		bituminous coal in deliveries to IMT for Crystal River Units 4 and 5?
10	A.	Such shipments would have reduced the affiliates' barge and dock revenues. PRB coal
11		would have reduced the market for PEF's affiliate coal companies, which were losing
12		money in 1995 and 1996. At the end of 1996 Florida Progress Corporation took a \$25.2
13		million charge for a write down of the value of its subsidiary's coal producing assets in
14		Central Appalachia.
15		
16	Q.	If PEF had purchased it at the time, how would PRB coal have moved to Crystal
17		River Units 4 and 5?
18	A.	There are three options. First, PRB coal could move entirely by rail to Crystal River
19		Units 4 and 5 with delivery by CSX and PRB and origination on either the BNSF or UP
20		rail lines. Second, the PRB coal could move to Crystal River Units 4 and 5 by rail to a
21		river dock, then by river barge to New Orleans, then by ocean barge to Crystal River
22		Units 4 and 5. Third, the PRB coal could move by single line BNSF or two line,
23		UP/BNSF or UP to CN (IC) or to NS or CSX to the McDuffie Coal Terminal in Mobile,

1		Alabama, then be transloaded to Gulf barge to Crystal River Units 4 and 5. I have
2		prepared a map at Exhibit (RS-17) that shows the relevant river and Gulf docks.
3		
4	Q.	Which route would have been the most economic?
5	A.	I believe via McDuffie at Mobile would have been the most economic. This is confirmed
6		by bids for "all rail" coal transported to McDuffie Terminal that PEF received on Aug 23,
7		2002 and May 8, 2003.
8		
9	Q.	Why do you say the bid confirms McDuffie as the most economic route?
10	A.	Because the BNSF would have competed with the UP/ICG for this movement.
11		Moreover, the Alabama State Docks at McDuffie had capacity, could blend, if necessary,
12		and would have been a less expensive Gulf barge haul to Crystal River than from IMT
13		(New Orleans). On May 8, 2003 BNSF and UP bid \$15.95/ton for test shipments to
14		McDuffie in railroad-owned cars, having earlier, on Aug 23, 2002, bid \$17.91/ton.
15		Usually post-test burn contract rail rates of the same vintage are not higher than the
16		railroad's test burn rates because volumes are higher and the term is longer.
17		
18	Q.	How much would PEF have saved its ratepayers per year from 1996 to 2005 had it
19		used PRB coal instead of bituminous coal via IMT to Crystal River Units 4 and 5?
20	A.	As I show later in my "excess charges" testimony, the savings at a 50% of Crystal River
21		Units 4 and 5 shipment level would have been \$5-10 million per year during the
22		period1996-2000, and in excess of \$15 million per year during 2001-2003. In 2004 PEF
23		would have reduced the amounts it charged customers through the fuel cost recovery

clause by \$17 million. In 2005 alone the available savings were almost \$22 million.

Because the prices of imported coal and CAPP coal surged in 2004 and 2005, but PRB

prices did not (see Exhibit_(RS-7)), PEF's failure to burn PRB coal in 2004 and 2005

led to highly excessive charges to PEF's ratepayers in 2004 and 2005. SO₂ allowance

damages were also higher in 2004-2005.

- Q. Have you prepared a table comparing the PRB delivered price via IMT (New Orleans) vs. the price of PRB coal delivered via Mobile?
- 9 A. Yes, at Exhibit (RS-20).

A.

- Q. Why did you calculate excessive fuel charges assuming PRB would have moved via

 New Orleans if you believe Mobile's Dock would have resulted in lower cost?
 - It came down to the availability of good data. I obtained from FERC reports actual purchase prices of PRB coal delivered to TECO's ECT terminal in New Orleans. I did not have the benefit of actual purchase data from a competing Mobile Gulf barge. Nor was I able to compare an actual purchase with a purchase of PRB coal delivered "all rail" to Mobile with PRB rail to Cook, Cora, or Cahokia, as well as all rail to Crystal River, which PEF/PFC should have done had it been interested in PRB coal. Since, as I stated, the Mobile route would have been the more economical, at least in some years, by using the IMT route in my calculations I have been deliberately conservative in the quantification of excessive fuel charges. Markets change, and a facility with the fuel and

1		transportation flexibility built into PEF's Crystal River assets should respond to such
2		changes. PEF did not respond or use Crystal River's flexibility.
3		
4	Q.	At this stage of your testimony, can you summarize the delivered price of PRB coal
5		to New Orleans docks compared to the cost of the bituminous coal that Progress
6		Fuels Corporation, PEF's coal procurement agent, actually purchased priced to
7		IMT at New Orleans?
8	A.	Yes. Let me start by comparing the delivered price of PRB coal to TECO's Electro-Coal
9		Terminal compared to FPC/EFC's delivered price of Crystal River Units 4 and 5 coal to
10		IMT as reported to FERC. These results are at Exhibit (RS-21).
11		
12	Q.	Are the differences significant?
13	A.	Very significant, especially on two million tons per year. They are equivalent to \$7.25 to
14		\$20.75 per ton on a 25 MMBtu/ton of bituminous coal heat value basis. However, these
15		1996-2003 results are subject to a slight Gulf barge Btu adjustment of about 12 to 16
16		cents/MMBtu and a blending cost at the Crystal River site of 4 cents/MMBtu against the
17		lower Btu/lb PRB coal which must be blended at Crystal River. I make these adjustments
18		in my "overcharges" calculations. These numbers to New Orleans were public FERC
19		data, which should have been a "red flag" to PEF/PFC's personnel, had they acted
20		prudently.
21		
22	Q.	How could they ignore TECO's PRB delivered prices versus their bituminous coal
23		delivered prices to IMT?

1	A.	It is a fundamental imprudency to ignore such market information.
2		
3	Q.	Would these savings have been achievable by any other bituminous coal source?
4	A.	During the period 1996-2003, some of the savings were achievable using either imported
5		South American bituminous coal, Colorado bituminous coal delivered by the water route,
6		or Central Appalachian "CAPP" bituminous coal delivered by rail directly to Crystal
7		River Units 4 and 5. In mid-2003, international coal prices rose, making imported coal
8		more expensive, followed by a "sympathetic" CAPP bituminous coal price jump in
9		August-September 2003. PRB subbituminous coal prices did not rise in 2004 or 2005,
10		making PEF's imprudent actions regarding subbituminous coal even more costly to
11		PEF's ratepayers in 2004 and 2005. (See "Overcharges" section at the end of this
12		testimony and Exhibit (RS-7) for coal price trends.)
13		
14	Q.	Does PRB coal have lower SO ₂ emissions than bituminous coal?
15	A.	Yes, much lower.
16		
17	Q.	Would the lower sulfur content of PRB coal have enabled PEF to lower fuel-related
18		costs further?
19	A.	Yes. Due to changes in the Federal Clean Air Act that affected Crystal River Units 4 and
20		5 on January 1, 2000, PEF was assigned "allowances" of SO2. If PEF had burned PRB
21		coal, it would have reduced its consumption of SO2 allowances. The additional savings,
22		which I calculate later, are \$1-2 million per year 2000-2003, \$4.2 million in 2004, and
23		rise to \$7.5 million in 2005.

1		
2	Q.	Was PEF aware of the opportunity to capture such savings?
3	A.	Yes. Documents provided to OPC during discovery show that PEF recognized the
4		impact of PRB coal's low sulfur content on the cost of allowances as a positive factor in
5	•	its evaluation of bids.
6		
7	Q.	Is there a document that summarizes the situation at Crystal River Units 4 and 5
8		regarding utilization of PRB/Central Appalachian blends?
9	A.	Yes. At Exhibit (RS-22) are the meeting minutes of a September 27, 2005 meeting
10		at Crystal River Units 4 and 5 which reviewed the upgrades required to burn PRB CAPP
11		blends.
12		
13	Q.	What was the conclusion?
14	A.	The furnace, convection passes, ESP's and pulverizers were designed for a 50% PRB
15		blend. While some upgrades were required, they did not involve major capital
16		investments. Further, NOx and SO2 emissions would drop, and O&M costs would
17		increase in some areas but decrease in others.
18		
19	Q.	What about FDEP?
20	A.	In February 2006 PEF met with FDEP and in May 2006 a PRB test burn was successfully
21		conducted.
22		
23	0	What was the result of the PRB test burn?

A. As reported to FDEP on July 20, 2006 at a 30%/70% PRB/CAPP blend in
--

"There were no substantial issues raised during this trial. Full load was achieved and LOI (loss of ignition) was as good as or better than the base line coal performance measurements. Major emissions constituents, such as NO2, SO2, and opacity, were equivalent to or better than the same constituents utilizing the base line coal.

In addition to the major emissions constituents discussed above, detailed stack testing of CO2 PM and ash resistivity testing were required to meet the Florida Department of Environment Protection (FDEP) requirements. Particulate Matter was basically unaffected by the PRB blend as compared to baseline. CO, which is not currently regulated, was reportedly low during the baseline tests. CO readings did register while burning the PRB blend."

O. Your conclusions?

A. It cannot be surprising that Crystal River 5, designed to burn 50/50 PRB/CAPP coal, was successful burning a 30/70% PRB blend. What this test did show was that the April 2004 test was mismanaged by PEF. In 2004 the Crystal River soot blowers, electrostatic precipitators (crucial to controlling dust), and some coal handling equipment had not been maintained, preparations for the test were inadequate, and plant personnel at Crystal River Units 4 and 5 had not been prepared or briefed adequately.

Q. Is this typical for utilities?

1 A. I am very familiar with the circumstances of introducing PRB coal to units 2 previously burning other coals. It is not surprising that with hundreds of millions of tons 3 of PRB coal being burned, knowledge of how to burn it is not scarce. In fact, for many years a "PRB Users Group" has existed which meets annually, technical papers are 4 5 available, and the major engineering consulting companies and boiler manufacturers have significant experience in introducing PRB coals into units that have not previously 6 burned them. Sargent and Lundy, PEF's consultant, was involved in the introduction of 7 PRB coal into TVA's power plants in the mid-1990's, and TVA's units were not 8 designed to burn PRB coal. 9

10

11

Q. Was FDEP supportive of PEF's proposal to conduct a test burn of PRB coal?

12 A. Yes. When FDEP issued its public notice on the Crystal River 5 test burn permit on
13 April 4, 2006 it cited a 2003 article "Burning PRB Coal" in <u>Power Magazine</u> on which it
14 relied in informing the public of the benefits of using PRB coal. The chief benefit that
15 the FDEP cited in its technical evaluation was the ability to lower fuel costs. See my
16 Exhibit (RS-23).

17

18

19

20

21

A.

Q. Could this May 2006 test burn have been conducted in 1995-1996?

Yes. Many utilities test burned PRB coal from 1989 to 1997. PEF could have done it too. In fact, bearing in mind that the 50/50 PRB/bituminous blend is the design basis coal for the units, it is surprising to me that PEF did not test the blend at the outset of operations in the early 1980s.

23

Trans	portation	Risks

2 O. Are there transportation risks to moving PR		Ο.	Are there	trans	portation	risks	to	moving	PRB	coal
--	--	----	-----------	-------	-----------	-------	----	--------	-----	------

- 3 A. No more than for any other long haul coal transportation movement. The PRB haul from
- 4 mine to IMT is 2,209 miles versus 1,703 miles for the CAPP coal from West Virginia
- 5 mines via PFC's Marmet dock.
- Moving PRB coal by rail in 200,000,000 to 400,000,000 tons per year quantities has
- occurred for 20 years. There were railroad disruptions in 1997-1998 and the last half of
- 8 2005, but these were no more severe than water route disruptions on the Ohio and
- 9 Mississippi Rivers and across the Gulf due to droughts, floods, and hurricanes. Those
- water route disruptions affect Central Appalachian bituminous coal, too.

11

1

12 Q. What is the mileage comparison via McDuffie at Mobile?

- 13 A. An all-rail PRB movement to McDuffie is 1,692 miles, and McDuffie is closer in Gulf
- barge miles to Crystal River than IMT. Therefore, coal from the PRB was a shorter haul
- to Crystal River Units 4 and 5 than the Central Appalachia coal/synfuels that PEF's
- affiliate PFC was shipping from Kanawha River docks to Crystal River Units 4 and 5.

17

- Q. But disruptions occur in the transportation of both PRB and Eastern bituminous
- 19 coals?
- 20 A. Yes. That is why utilities maintain and bill ratepayers for coal inventories.
- 21 Transportation disruptions, either on rail or on water routes, have not been nearly as
- severe as the UMWA strike disruptions that routinely occurred in the eastern coal fields
- 23 up until 1993.

1		
2	Q.	When PEF/PFC received PRB bids in 2003 and 2004, did PEF need to make the
3		railroad arrangements?
4	A.	That was optional for PEF. PEF/PFC received bids FOB dock from qualified bidders that
5		had arranged for the coal supply in Wyoming, had the train sets to move the PRB coal
6		1,240 miles to the docks in southern Illinois, and had contracted for the dock space to
7		transload coal to river barges.
8		
9	Q.	Did PEF/PFC receive bids for rail transportation alone?
10	A.	Yes. In 2004 bids for rail rate and dock rates including rail cars were received.
11		Therefore, PEF could have purchased coal FOB mine and coupled this purchase with a
12		rail services purchase, or purchased coal FOB with rail-to-dock services from a single
13		vendor.
14		
15	PRB	Bids To Crystal River In 2003 And 2004
16	Q.	What did the PRB coal bids that PEF received in July 2003 reveal about the
17		economics of PRB coal vs. Central Appalachian coal, imports and synfuels,
18		delivered to Crystal River Units 4 and 5?
19	A.	Multiple PRB bids for 2004 and 2005 coal were offered that could have been delivered to
20		Crystal River Units 4 and 5 at \$1.99 to \$2.00/MMBTU. Western bituminous Colorado
21		coal was offered at the same delivered price. PRB-capable units like Crystal River Units
22		4 and 5 usually over the long run find PRB coal less expensive than Colorado bituminous

coal. However, for the non sub-bituminous portion of the 50/50 Crystal River Units 4

1		and 5 blend, Colorado bituminous coal could be competitive with Central Appalachian
2		coal via the water route.
3		
4	Q.	According to the July 2003 bids, what was the delivered price of non-affiliate
5		Central Appalachian bituminous coal to Crystal River Units 4 and 5 via IMT?
6	A.	\$2.39/MMBTU.
7		
8	Q.	And PFC affiliate coal?
9	A.	\$2.42/MMBTU, but as I testified earlier, PFC synfuels had no committed supply to bid
10		
11	Q.	And imported coal?
12	A.	\$2.02/MMBTU via McDuffie was the lowest bid. Bids via IMT were 2.13/MMBTU.
13		
14	Q.	So, delivered via IMT PRB was the least expensive?
15	A.	Yes.
16	•	
17	Q.	Did PEF/PFC consider PRB bids via McDuffie?
18	A.	No, even though PEF had rail bids from UP/BNSF to McDuffie.
19		
20	Q.	So what did PEF/PFC do?
21	A.	PEF ignored the low PRB bids, and bought higher priced coal.
22		
23	Ο.	What did the bids received in April 2004 for 2005 and 2006 coal reveal?

1	A.	PRB coal was the low bid by an even wider margin. See Exhibit (RS-24). CAPP
2		and world (imported) coal prices had increased, but PRB prices had not. PRB coal
3		offered huge savings to ratepayers.
4		
5	PEF/	PFC's September 2004 Exclusive Award To An Affiliate
6	Q.	Did PEF/PFC conduct another solicitation in September 2004?
7	A.	No. PFC's Mr. Pitcher contacted three vendors: two foreign producers and his affiliate
8		for Central Appalachian bituminous coal/synfuels.
9		
10	Q.	Was PRB coal solicited?
11	A.	No.
12		
13	Q.	Was water route Central Appalachian coal or synfuels solicited from any non-
14		affiliate?
15	A.	No.
16		
17	Q.	How many tons were purchased from PEF's affiliate?
18	A.	40,000 tons per month over 2005 and 2006, or 480,000 per year for two years
19		
20	Q.	Why do you believe this award was imprudent?
21	A.	As I stated in a November 2005 affidavit:
22		• PEF did not conduct a solicitation or contact any other CAPP/synfuels bidder,
23		despite its lengthy CAPP coal bid list.

23		imprudent purchase?
22	Q.	Do your calculations of excessive charges provide the ratepayer relief from this
21		
20	A.	PRB coal was the only coal available in September 2004 that had not risen in price.
19		CAPP coal?
18	Q.	What coal should PEF have procured in September 2004 as opposed to its affiliate's
17		
16		imprudent.
15		Exhibit (RS-25). So the market was already "spooked". Mr. Pitcher's actions were
14		according to the trade press of August and September 2004, PEF was in the market. See
13	A.	This claim is no excuse for not contacting any other U.S. domestic coal supplier. Further,
12		fear of "spooking" the market?
1	Q.	What is your response to PEF's claim that it did not want to do a solicitation for
10		
9	A. •	No. Only 321,100 tons of affiliate coal was delivered.
8	Q.	Was the 480,000 tons of affiliate barge coal actually delivered in 2005?
7		
6		origin coal for Crystal River 1/2 to be delivered over seven months.
5		• At the same time PEF/PFC also purchased from its affiliate 210,000 tons of rail
4		substitute for a solicitation and bids.
3		PEF used published trade press prices to justify the price which data are no
2		on the Kanawha River to an affiliate.
1		• PEF effectively sole sourced a 480,000 ton/year, two year purchase of barge coal
1		• PHE ETTECTIVELY COLE COURCEA & /IXII HIN) ton/views two views nurchana of bases and

1	A.	Yes.
2		
3	SEC	ΓΙΟΝ VI
4	CAL	CULATION OF EXCESSIVE FUEL CHARGES AND CONCLUSIONS
5.	Q.	Did you calculate the excess costs billed to PEF's ratepayers from 1996 through
6		2005 due to PEF's imprudent actions regarding purchases of water route coal, its
7		failure to maintain its authority to burn PRB coal at Crystal River Units 4 and 5,
8		and its failure to use PRB coal in Crystal River Units 4 and 5 when market
9		conditions warranted its use?
10	A.	Yes. These costs are of two types: excess fuel cost and excess SO ₂ allowance cost.
11		They are summarized in Exhibit (RS-26). The excess charges total \$134.5 million,
12		representing \$116.6 million for excessive coal costs and \$17.9 million for excess SO2
13		allowance costs.
14		
15	Q.	Please describe the methodology you used to arrive at the \$134.5 million figure.
16	A.	My analysis compares the costs that PEF actually incurred during the period by
17		purchasing bituminous coal and synfuel with the lower costs that, based on information
18		that PEF knew or should have known at the time, PEF should have realized for its
19		ratepayers.
20		
21	Q.	How did you calculate the actual costs that PEF incurred?
22	A.	The actual costs, including the costs of transportation, are reported to the FERC and to
23		this Commission monthly on Form 423.

1		
2	Q.	How did you calculate the costs at which PEF could have purchased the more
3		economical alternative during 1996-2005?
4	A.	During much of this period, TECO purchased PRB coal and transported it first to the
5		dock on the Mississippi that TECO's affiliate owns, then to TECO's Gannon station
6		Again, this actual purchase information was available to me for years 1996-2002 from the
7		Form 423 that TECO files with the FERC and the FPSC on a monthly basis. The price
8		that TECO actually paid for PRB during those years makes an excellent and accurate
9		proxy for the price at which PRB coal was available to PEF during the same time frame
10		Additionally, the cost of transportation to New Orleans incurred by TECO to move PRE
. 11		coal to ECT represents the cost that PEF would have incurred to move the coal that far
12		It remained only to calculate the differential cost that PEF would have incurred to
13	•	transport the PRB coal from New Orleans to Crystal River vs. the cost of moving
14		bituminous coal across the Gulf.
15		
16	Q.	For years following 2002, what did you use as the basis for the cost of PRB coal to
17		PEF?
18	A.	In 2003 and 2004 PEF issued Requests for Proposals, to which producers of PRE
19		responded. I used actual bids by PRB producers to PEF as the source of the price a
20		which PEF could have purchased PRB coal in 2004, and 2005.

Q. What quantities of PRB coal did you assume?

1 A. I assumed that, after an initial ramp-up phase, a prudent PEF would have burned the "design basis" 50/50 blend of sub-bituminous and bituminous coals during the period in question.

4

5 Q. Why did you assume the 50/50 "design basis" blend?

A. The designers of Units 4 and 5 guaranteed that the units would operate as specified when burning the design basis coal. Accordingly, by using the design basis coal I mooted any issue or contention that my assumptions would have caused operational problems or deratings at the plant site, or that they would have required significant additional investment. Since several utilities successfully burned more than 50% PRB coal, I think the 50/50 assumption is conservative.

12

13

Q. You mentioned that you assumed a "ramp-up" phase. Please elaborate.

14 A. I assumed that in the first year of shifting PEF could have burned about 25% PRB coal,
15 and that it would have reached the 50% level during the second year. In my experience, I
16 think this would have been a reasonable expectation.

17

18

Q. Did you make any other adjustments?

Yes. Earlier I mentioned that there were transportation disruptions in the last half of 2005. While I believe these would have been fully mitigated with a prudent inventory strategy, to be deliberately conservative I assumed in 2005 PEF would have replaced 7.5% of PRB coal with more expensive bituminous coal, corresponding to a 15% shortfall due to the western railroad's last half of 2005 partial force majeure.

1		
2	Q.	Have you provided an exhibit that explains your calculations in more detail?
3	A.	Yes. See Exhibit (RS-26).
4		
5	Q.	Can you provide an overview of your imprudency and "overcharges" claims?
6	A.	Yes. I believe it is helpful to regard the imprudent actions and resulting overcharges as
7		occurring during three "subperiods." In 2004 and 2005 bituminous coal prices surged, as
8		did SO ₂ allowances prices. PEF's failure to burn subbituminous PRB coal, despite the
9		firm qualified bids it had received, was very costly to PEF's ratepayers. This failure was
10		due to PEF's imprudent failures to be prepared to burn PRB coal and to conflicts of
11		interest with affiliate companies that profited from the high priced bituminous coal and
12		synfuels that were paid for by ratepayers. In 2004 and 2005 alone these damages were
13		\$50,886,618.
14		
15	Q.	What about the years 2000-2003?
16	A.	During these "synfuels years", PFC affiliates profited from high-priced coal and synfuel
17		sales to PEF under an air permit issued in early 2000 that should have, had PFC acted
18		prudently, allowed PRB coal to be burned. These actions over 2000 to 2003 cost the
19		ratepayers \$60,847,549.
20		
21	Q.	And prior to 2000?
22	Α.	The failure of PEF to test burn, for operational proving, and burn PRB coal under the air
23		permits issued to Crystal River Units 4 and 5 that contemplated a PRB burn in a 50%

CAPP/PRB blend stands in stark contrast to the actions of other southeast utilities who responded prudently to the favorable economics of PRB coal, from 1993 forward. Again, PEF instead favored its affiliate dock, barge, and coal producing companies at the expense of ratepayers. The cost to the ratepayers of these imprudencies for the years 1996 to 1999 was \$22,789,176.

Q. What is the total amount of overcharges stemming from these imprudencies?

A. The total is \$134.5 million, before the addition of an appropriate interest factor.

Q. Do you have additional observations?

A. Yes. Of necessity, my analysis addresses a specific time frame. While my recommended adjustments will prevent customers from bearing excessive Crystal River 4 and 5 fuel costs incurred during 1996-2005, I have seen indications that the same type of procurement activity by PEF will impact customers adversely in 2006 as well. I encourage the Commission to continue to monitor such transactions and make additional adjustments where warranted.

18 Q. Does that conclude your direct testimony?

19 A. Yes.

BY MR. McGLOTHLIN:

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Q Mr. Sansom, have you prepared a summary of your direct testimony?

- A Yes.
- Q Please proceed.

A Madam Chairman, Commissioners, I'd first like to point out that last year in the United States we produced 1.1 billion tons of coal. 440 million tons of that coal was produced in the Powder River Basin of Wyoming and Montana. The Powder River Basin coal goes to hundreds of power plants run by 50 utilities and it's burned every day in huge quantities safely.

The phenomenon of the Powder River Basin is based on the fact that the coal is low in sulfur content, occurs in 100-to 150-foot seams covered by only 100 feet of overburden, in contrast to Central Appalachian coal that occurs in two- to three-foot seams often underground under hundreds of feet of overburden. It is an economic phenomenon of this last generation and it has reduced ratepayer fuel costs throughout the United States enormously and led to major environmental benefits because it has lower sulfur dioxide emissions than any other coal.

There are three overriding imprudencies that I found in my review of Progress Energy Florida's procurements: The failure to use markets in competition, preferring instead to

use affiliates at a huge cost to PEF's ratepayers.

The second overriding imprudency, the failure to maintain and use the capability of Crystal River 4 and 5 to burn Powder River Basin sub-bituminous coal. The unit costs about 20 percent more to have that capability. It had to be a bigger box, a bigger boiler, bigger precipitators, a more complicated coal yard to blend the two coals in a 50/50 blend. That cost the ratepayers money. But PEF failed to use that capability.

The third overriding failure is the failure to use the transportation flexibility of the Crystal River site to take coal by rail and water, and in particular the failure to utilize the all-rail route to Mobile, Alabama, and then by ocean barge to Crystal River as the least-cost route. To give you a couple of mileages, the total mileage to take Central Appalachian coal by the water route via New Orleans is 2,090 miles to Crystal River. It is shorter to bring Powder River Basin coal to Mobile, Alabama, and across the Gulf to Crystal River by 50 miles. So it's 2,040 miles Powder River Basin coal to Crystal River, 2,090 miles Central Appalachian coal via New Orleans the way Progress wants to move its coal.

Now it would cost -- it would really require another 600 miles to move Powder River Basin coal by the rail route to Southern Illinois and then down the water route through New Orleans over to Crystal River. So the most efficient way to

move Powder River Basin coal to Crystal River is through Mobile, Alabama.

I began my investigation by looking at the fuel costs in 2005, and I answered the standard -- asked the standard question I ask in any review of prudency: Let's see the 2004 procurement. To my astonishment I found that the low bids were Powder River Basin coal and they were evaluated on a dollar-per-MMBtu basis substantially lower. And had they been -- had the buyer executed the contracts that were bid from the railroads and the coal companies for Powder River Basin coal, it would have saved the ratepayers in 2005 \$29 million.

The next thing I did is look at the 2003 procurement solicitation. I went through the same analysis, and the result there was that had they bought Powder River Basin coal as offered to them and offered by the railroads to deliver to them, they would have saved \$20 million. That's \$50 million in two years.

Then I looked further. I looked back at the period I call the synfuels period from 2000 to 2003 and found that Powder River Basin coal would have saved the ratepayers \$15 million a year in those years for a total of \$60 million on top of the \$50 million. So we have \$110 million from 2000 to 2005, and there's about \$6 million a year in savings going back from 1999 to 1996. And a key thing that drives the huge savings that could have been realized in '04 and '05 had Powder

1	River Basin coal been utilized is that the world market for
2	bituminous coal which influenced imported coal and Central
3	Appalachian bituminous coal skyrocketed in 2004 and 2005. This
4	was just the circumstance for which Crystal River 4 and 5 was
5	designed to use Powder River Basin coal, because Powder River
6	Basin coal did not increase in price in 2004 and 2005 and
7	that's why you have the \$50 million in lost savings by the
8	failure to utilize Powder River Basin coal in that year. That
9	concludes my summary.
10	MR. McGLOTHLIN: Mr. Sansom is available for
11	cross-examination.
12	CHAIRMAN EDGAR: Thank you.
. 13	Okay. Mr. McWhirter, any questions?
14	MR. McWHIRTER: I have no questions.
15	CHAIRMAN EDGAR: Okay. Any questions from the
16	Attorney General's Office?
17	MS. BRADLEY: No questions.
18	CHAIRMAN EDGAR: Mr. Twomey?
19	MR. TWOMEY: No, ma'am.
20	MR. BREW: No, ma'am.
21	CHAIRMAN EDGAR: White Springs, no questions. Okay.
22	Mr. Burnett.
23	MR. WALLS: Actually, Commissioner, it will be me,
24	Mr. Walls.
25	CHAIRMAN EDGAR: Okay.

CROSS EXAMINATION

2 BY MR. WALLS:

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- Q Good morning, Mr. Sansom.
- A Good morning.
 - Q We've met before; right?
- 6 | A Yes.
 - Q At your deposition; correct?
 - A That's correct.
 - Q Mr. Sansom, is it your position that every coal purchaser should purchase the lowest-priced fuel on a delivered basis no matter what type of fuel it is?

Α It's my position that fuel should be purchased on a bus bar basis. That is the lowest evaluated basis through the bus bar, considering all effects. It should be the basis. in a facility like Crystal River 4 and 5 which was designed for Powder River Basin coal, you can conduct the analysis, as Mr. Pitcher did in 2004, on a dollars-per-MMBtu basis because the engineering studies show there's no adverse effect from burning a 50/50 blend of sub-bituminous coal because that's the way the boilers were designed. With one exception, and I include this in my damages: The sulfur dioxide emissions from the Powder River Basin coal in Crystal River 4 and 5 would have been significantly less than the sulfur dioxide emissions that resulted from the combustion of Central Appalachian coal and synfuels in Crystal River 4 and 5. And that has to be

1 considered as a benefit in a bid evaluation. 2 Mr. Sansom, do you recall I asked that same question to you in your deposition and you gave the following answer? 3 "Mr. Sansom, can you tell me if it's your position 4 that every coal purchaser should purchase the lowest-priced 5 fuel on a delivered basis, no matter what type of fuel it is?" 6 7 Answer, "No, I never said that." 8 Is that accurate? 9 Α Sure. That's what I just said. 10 Now, Mr. Sansom, you would agree with me that the 11 type of coal and its handling and operational characteristics are considerations in the decision to purchase coal; correct? 12 13 A Yes. 14 And you're familiar with the characteristics of PRB 15 coals; correct? 16 Yes. Α 17 And you would agree with me that they are friable and 18 more dusty than bituminous coals. 19 Α They are more friable and dusty than bituminous 20 coals. That's correct. 21 And you would also agree with me that they have a higher moisture content than bituminous coals; correct? 22 23 They have a higher moisture content but lower ash Α

And you would also agree with me that PRB coals are

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content and lower sulfur.

subject to spontaneous combustion; correct?

- A They can be in certain circumstances, as can bituminous coals.
- Q And, in fact, you told me that the bituminous coals were not subject to the spontaneous combustion in any comparable way to the Powder River Basin coals; correct?
- A That's what I just said. In other words, you can't say bituminous coals aren't subject to spontaneous combustion, they are, but they're less prone to spontaneous combustion than sub-bituminous coals. But I have seen bituminous coals that are subject to almost the same risk of spontaneous combustion as sub-bituminous coals.
- Q And, Mr. Sansom, you would agree with me that when a company goes out for coal procurements using an RFP process, the coal RFPs should be written and sent to a large number of suppliers and advertised; correct?
 - A Yes.

- Q And you would agree that the RFPs that were conducted by PFC for CR4 and CR5 were advertised; correct?
- A The summary statement appeared in the trade press, yes, about the -- let me be careful here. The contract procurements were advertised. The spot procurements were not.
- Q Mr. Sansom, you would agree with me that a coal purchaser does not have to call every supplier who doesn't respond to an RFP after the responses to that RFP are received;

correct?

2 A Yes.

Q And by the way, you can't provide me with a document where you communicated with PRB producers and asked them how many RFPs they responded to in the '90s and whether they didn't respond to them; correct?

A I visited the PRB producers, and they do respond to all solicitations and they were in excess supply during this period, but I did not survey them and ask them to give me all the bids to which they respond. I do know them, work with them. They respond to all bids and did certainly in the '90s and through 2004.

Q Do you recall the question I asked you in your deposition?

"Can you provide me a document that shows where you communicated with PRB producers and asked them how many RFPs they responded to in the '90s and whether they didn't respond?"

Answer, "No, I can't show you that. I just met with them."

Is that accurate?

A Yes.

Q Now, Mr. Sansom, you would agree with me that Progress Fuels Corporation conducted a thorough RFP solicitation in 2004; correct?

A Yes.

FLORIDA PUBLIC SERVICE COMMISSION

1	Q And you would agree with me that PFC's bidder list
2	included all major PRB suppliers in the 2004 solicitation;
3	correct?
4	A My recollection, I looked at the bids, didn't look at
5	the bid list, but bids were received from the major producers
6	in the Powder River Basin in the 2004 solicitation.
7	Q And you would agree with me that the bidder list in
8	the late '90s included PRB suppliers Arch, Peabody and
9	Kennecott on the bidder list; correct?
10	A But omitted two of the major ones. And that's
11	particularly important here because the ones omitted were the
12	ones that exclusively sold Powder River Basin coal, but two of
13	them that were included were ones that sold Central Appalachian
14	coal and Powder River Basin coal.
15	Q Mr. Sansom, you would agree with me my question
16	was, you would agree with me that one of the that in the
17	late '90s the PRB suppliers on the RFP bidder list for PEF
18	included Arch, Peabody and Kennecott; correct?
19	A Yes. But they did not include two of the other ones
20	and should have.
21	Q And you agree that these three suppliers, Arch,
22	Peabody and Kennecott, represented the three largest producers
23	of PRB; correct?
24	A Yes.

And, in fact, you told me that those three

1 represented 70 to 80 percent of the PRB market; correct? 2 А That's correct. I want to turn to your damages calculations that you 3 used in coming up with your analysis here, Mr. Sansom, and I'm 4 going to be using the one that you corrected in your deposition 5 so we can see those corrections here. If you would pass this 6 7 out. 8 CHAIRMAN EDGAR: Mr. Walls, is this in a current 9 exhibit? 10 MR. WALLS: Yes. It's RS-27, which is in 11 Mr. Sansom's direct testimony. 12 CHAIRMAN EDGAR: Thank you. But he has his corrections from the 13 MR. WALLS: 14 deposition on this document. 15 BY MR. WALLS: 16 Mr. Sansom, if you would look at RS-27, which is, as 17 you can see, Exhibit 1 from your deposition; is that accurate? 18 Α Yes. 19 And on this document you made three corrections to 20 your fuel damages summary; correct? 21 Α Yes. 22 0 And you prepared this, this number, the \$116,595,000 23 in the lower right-hand column? 24 Α Yes.

FLORIDA PUBLIC SERVICE COMMISSION

And that number is the one that was put up on the

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104 screen by Mr. McGlothlin during the opening from RS-26? 1 2 Yes. And this is the damage summary of how you calculated 3 4 that number; correct? 5 It is a summary of the calculation. And behind it you have your summary of your 6 Q 7 methodology; correct? 8 Α Yes. And in your damages calculations you used all of 9 10 TECO's costs up to the point of the ECT terminal at Davant near 11 New Orleans as TECO reported them on its FERC Form 423s for the 12 years 1996 to 2002; correct? 13 For only those years. I used the solicitations for 14 '04 and '05 and I used the TECO delivered price as a starting 15 point to Davant for the years 1996 through 2002. Those were 16 the only years that those deliveries took place. And then I 17 made a, an escalation adjustment to get '03 from the '02 data. 18 Q And so the answer to my question would be yes --19 Α For that, for that period. 20 -- you used the TECO Form 423s to come up with that Q 21 data; correct? 22

Yes. Α

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And you also used the FERC Form 423s in your damages calculations for Progress Energy Florida for the reported prices as delivered to IMT terminal near New Orleans in your

Column 5 on RS-27; correct?

- A That's correct.
- Q And you would agree with me that by the time the delivered price is reported, the coal has already been solicited or offered and a contract entered into and transportation arranged to get that coal to that point; correct?
 - A Yes.
- Q And you would agree with me that if a spot transaction is reported on the FERC Form 423, that is evidence of a spot transaction that occurred up to a year in advance of the date of the FERC Form 423 as it is reported; correct?
 - A Yes.
- Q And if it was a contract transaction reported on the FERC Form 423, what would be reported would be an embedded price from the vintage year of that contract that's being reported; correct?
- A Not necessarily. If it has a price reopener mechanism, it may not go back to the original date of execution because many of the contracts might be for ten years but they might have a price reopener every three years.
- Q And you told me that that periodic market adjustment, the price reopener in the contract, depending on the contract itself may occur quarterly or every six months or more, right, depending on the contract?

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Α Yes.

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And so, for example, if we looked at the first number that you have for the CAPP coal in Column 5 of your RS-27 at \$1.71/million Btu for 1996, you pulled that from the FERC Form 423 for PEF, and you would agree that that \$1.71 rate includes contract prices that were entered into and arrived at prior to the year 1996; correct?

Α Yes.

Now if we look at Column 6 on your RS-27, your fuel damages calculations, you would agree that that is the column that contains TECO's delivered PRB prices to ECT during the period 1996 to 2002, including TECO's river barge costs to deliver to ECT; correct?

Α Yes.

And you would agree that the river barge component of TECO's delivered prices in Column 6 of RS-27 for the years 1996 to 2002 included a proxy or cap based upon the delivered rail prices to other Florida utilities; correct?

Α No.

Well, we would turn to your deposition, Page 37, Lines 13 to 25, carrying over to Page 38, Line 1, where I asked you the question and you gave the following answer:

Question, "But it was not a market rate, it was a proxy rate established by the Commission under a benchmark test; right?"

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"Mr. McGlothlin: Had you finished your answer?"

You said, "No. The TECO rate, I think, described the components of the TECO delivered price, and the only component that would be involved in a proxy or cap would be the river segment of that movement. And my understanding of the TECO cap is that it was based upon the delivered rail prices to other Florida utilities, but it was never -- it was a cap. They

Is that correct?

never got up to that."

- A That's correct, yes. Your question wasn't correct.
- Q And you agree with me that during that period of time when that benchmark cap was in place, TECO was allowed to charge whatever they incurred under this cap and collect it; correct?

A No. I don't think that's a fair summary of what TECO was allowed. In your -- the cap was never effective, so what TECO recovered in its affiliate barge rates on the Mississippi River was whatever they proposed, but I haven't looked at each of those rate cases. But since the cap was never reached, and the cap is the cumulative of all the transportation costs from the Illinois basin where TECO takes its coal, I don't think I can agree with you.

Q Well, if we look at your deposition, Page 38, Lines 3 to 7, you were asked the question:

"Right? And they were allowed to charge whatever

they incurred under that cap and collect it; right?"

Answer, "Until the Commission disallowed their transportation in the 2004 proceeding."

A That's a correct answer. But the cap -- it was under the cap is the key. I mean, it's an important distinction.

But the cap wasn't the governing factor in the rates that TECO recovered.

- Q If you would turn to RS-27, Exhibit 1 of your deposition, which you have in front of you.
 - A I don't have my deposition. Is that this?
- Q I'm sorry. The Exhibit 1 that I gave you, the RS-27, the corrected exhibit that I just handed to you, Mr. Sansom.
 - A Yeah. Okay.

- Q That's what I'm using. I'm using the one that you had corrected.
 - A Oh, we're back -- all right. I'm sorry.
- Q Yes. If you would go back to the second page and look under Item 2 in your explanation of your damage methodology, you say, "For PRB price use for years available, 1996 to 2002, the TECO to ECT price of PRB coal for Gannon, adjust by ocean barge rate for lower Btu coal to CR4 and 5 using PEF barge rate for the appropriate year." Did I read that accurately?
 - A Yes.

CHAIRMAN EDGAR: Mr. Walls, before we go into your

next question, since this has, has changes to it, I think we need to go ahead and mark the first document that you handed out, or label, label and number, that is. So I am on 207. And will you give me a title?

MR. WALLS: This is the Revised Fuel Damages Summary, revised by Mr. Sansom during his deposition.

CHAIRMAN EDGAR: Thank you.

(Exhibit 207 marked for identification.)

BY MR. WALLS:

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- Q Mr. Samson -- I'm sorry. Mr. Sansom, I've shown you what we marked as Exhibit 4 to your deposition, which was PEF's Interrogatory to OPC Number 16, where we asked you to explain the gulf barge adjustment that you use in your calculation of damages in RS-27. And is this document your answer?
 - A Yes.
- Q And you would agree with me that to deliver PRB coal to ECT, the TECO terminal at Davant, as reflected in the years 1996 to 2002 in your Column 6 of RS-27, there would be a cost to offload the coal at ECT terminal, store it and then load it onto a gulf barge; correct?
 - A Yes. About \$1.50.
- Q Mr. Sansom, if you would look at the second column entitled Gulf Barge Rate, do you see that, on Exhibit 4 to your deposition, your answer to the Interrogatory Number 16?
 - A Yes.

1	Q And if you would look at Footnote 1, you reference a
2	PEF document, PEF Fuel-004725; correct?
3	A Yes.
4	Q What I've handed you, Mr. Sansom, was what we marked
5	as Exhibit Number 5 to your deposition, which is PEF Fuels
6	document, PEF Fuels Bates number 004725. Is this the document
7	you used to calculate your Gulf barge rate?
8	A Yes.
9	Q And those numbers you used in your calculation of the
10	Gulf barge rate represent the portion of the waterborne
11	transportation market proxy that applied to Gulf shipments
12	during the years 1996 to 2002; correct?
13	A Yes.
14	Q And between 1996 and 2003, the waterborne
15	transportation that was used for CAPP coals and for import
16	coals that PEF bought, a market proxy rate applied; correct?
17	A Well, this component we're addressing one
	component. I detect that you may be trying to go beyond the,
19	the market proxy, beyond the ocean segment. But this is the
	ocean segment. The ocean barge billing was as reflected in
21	Column 1 of Exhibit 4.
22	Q Mr. Sansom, if you would look at Page 43 of your
23	deposition, Lines 8 to 12 where I asked you the following
24	question, you gave the following answer:
į.	

"And between 1996 and 2003, the waterborne

transportation that was used for CAPP coals and for import coals that PEF bought, a market proxy rate applied; correct?"

A Yes. That's why you just misstated the other question because you were trying to go from the ocean Gulf component and I suspected that's what you were trying to do. This is the entire water proxy, which was approved by the Commission for affiliate Central Appalachian coal loaded on the Kanawha River down the Ohio River down the Mississippi River to New Orleans, and the only component I'm using here in my Column 1 is the ocean barge component.

Q Mr. Sansom, you answered the question that for those transactions that is a correct statement; correct?

- A And the question was "used for CAPP coals."
- Q That's what I asked you.

A No, that's not the question you asked in your first one. But now that we've clarified it, the answer applies to CAPP coals.

Q Mr. Sansom, this is a document we produced in discovery and showed you in your deposition at Exhibit 7, Bates range PEF-Fuel-007371 to PEF-Fuel-007372. And if you compare the numbers for the DFL, the Dixie barge rate on this document for the years 1996 through 2002 in your calculations, they're the exact same numbers you have recorded in your column for the Gulf barge rate in your answer to Interrogatory 16 explaining the Gulf barge rate adjustment; correct?

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A Yes.

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Q Now above that line on this document there is a rate for the IMT terminal. Do you see that on the document?

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A Yes.

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Q And you agree with me that you have no evidence to suggest that the delivered price reported by TECO on the Form 423 to TECO's ECT terminal at Davant includes a cost of unloading the river barges and loading the Gulf barges;

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correct?

A It does not include the roughly \$1.50 to \$1.70 per ton to transload coal at New Orleans.

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O Go to the next exhibit.

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a document that we marked as Exhibit 8 to your deposition. And

Mr. Sansom, I've shown you another document, which is

And if you look at Column A on this exhibit and you

And that's a mistake. And let the record show that I

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if you would look at Exhibit 8, would you agree with me that the first six columns on Exhibit 8 are identical to the first

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six columns on your damage calculation in your Exhibit RS-27?

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A Yes.

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compare it to the prior document PEF-Fuel-007371 to 7372, you

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will find that the IMT rates for '96 to 2002 are identical to

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what is on this document; correct?

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did not produce this document and the Column A number, which is

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extracted from the Central Appalachian waterborne proxy which

is approved by the Commission. This is your effort to try to 1 apply it to Central Appalachian coal -- I mean to Powder River 2 Basin coal, which it would not apply because, as I pointed out 3 in my opening, an overreaching imprudency here was the failure 4 to use the route via Mobile, Alabama, for Powder River Basin 5 coal. And my testimony is that any rates through New Orleans 6 would have to compete in a competitive market with the \$15.95 Burlington Northern rail rate to Mobile, plus just the 8 ocean component of the barge movement which I used in my 9 calculation. So you're trying to bootstrap your waterborne 10 proxy onto Powder River Basin coal by including Column A, which 11 I think is incorrect. 12

Q Mr. Sansom, you may recall my question was simply if you would compare Column A on this exhibit to the prior document PEF-Fuel-007371, 7372, you will find the IMT rates for '96 to 2002 are identical.

A Yes. But what's --

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- Q Correct? That was my question.
- A But what's wrong with that, that's your question.
- O That was my question.

A But you're trying to apply it to Powder River Basin coal and that's inappropriate. It's not applicable, the Commission never approved it, and Powder River Basin coal would move by Mobile. The only reason I used the Davant transactions was that those were transactions I had for every year. But the

price through New Orleans, the coal to Crystal River would not move through New Orleans unless it could beat out the Mobile route.

Q Mr. Sansom, we'll get to those parts of your testimony, but I'd appreciate it if you'd just answer my questions directly. Can you do that for me, please?

A I'll try.

MR. McGLOTHLIN: I think the witness is entitled to explain why he disagrees with the premise of the question.

CHAIRMAN EDGAR: The witness is directed to answer the question that is asked and can take the time to clarify his answer, if needed.

BY MR. WALLS:

Q Mr. Sansom, you would agree with me that the math is correct, if we add in a rate for transloading based on the IMT rate in document PEF-Fuel-007371 to 007372, you would take, for example, for 1996 \$4.20 a ton, multiply it by 500, divide it by 8,800 Btu content for the PRB coal and get 24 cents per million Btu; correct?

- A The math is correct. The calculation is wrong.
- Q And if we look at Column C on this exhibit is where you come up with the dollar a million Btu PRB ocean barge penalty, and those numbers in Column C are identical to your numbers in your answer to Interrogatory 16; correct?
 - A That's correct.

1 And what you are doing in this calculation shown in 2 Column C is moving the coal from the terminal across the Gulf, 3 assuming the dollar per ton rate is the same for CAPP and PRB 4 coals, but because PRB has a lower MMBtu value, the PRB coals will carry a penalty or extra cost above the cost to transport 5 6 CAPP coals; correct? 7 Α That's correct. And, Mr. Sansom, in your direct testimony you 8 9

included 4 cents per million Btu blending costs in your calculation of damages in RS-27; correct?

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I did. But I've withdrawn that in my rebuttal Α testimony.

Okay. Well, we'll get to that in your rebuttal All right? period.

Α Whenever. I just want the Commission to know that that was -- made an assumption about blending that on further discovery was, that cost was not necessary to be added to Powder River Basin coal because the Crystal River facility was designed to blend Powder River Basin coal with Central Appalachian coal.

MR. WALLS: Commissioners, I will be glad to take his rebuttal testimony now rather than having him come back, if that's what we want to do.

MR. McGLOTHLIN: No. The -- I think, again, the witness is free to clarify his answer. Yes, he did it at one point, but it's no longer applicable. I don't think it serves the Commission's purposes to have him acknowledge a yes when more is needed to explain his position.

CHAIRMAN EDGAR: Mr. Walls, if you'll proceed with your cross on direct.

BY MR. WALLS:

Q Mr. Sansom, looking back at what we marked as
Exhibit 8 to your deposition, if you only add to your original
damages claim in RS-27 a missing terminal charge at the IMT
terminal proxy cost shown in PEF's documents, you would
mathematically get the results where your damages are reduced
from \$116 million to just above \$24 million; correct?

A If you make those mistakes, those three mistakes you just made, you'll get that mistaken result.

Q Now, Mr. Sansom, let's talk a bit about blending charges in your calculation in RS-27. It's true, Mr. Sansom, that if you're blending coals, all of the cost of the coals would have to be blended, right, both the CAPP tons and the PRB tons; correct?

A But I just testified, and I want the Commission to know this, the coal yard at Crystal River 4 and 5 was designed to blend 50 percent Central Appalachian coal delivered by rail and 50 percent sub-bituminous coal delivered by water, and, therefore, there would be no incremental cost. This was a discovery I made once we obtained the coal yard design and

1 performance specifications for Crystal River 4 and 5. So there 2 would be no blending cost. Mr. Sansom, if you would look at Page 66 of your 3 Q deposition, Line 23 to 25, carrying over to Page 67, Lines 1 to 4 2. 5 6 The question was asked, "Now isn't it true, 7 Mr. Sansom, that if you're blending coals, all the coals would 8 have to be blended, right, both the CAPP tons and the PRB tons; 9 correct?" 10 Answer, "Yes. You blend them 50/50." 11 Is that accurate? 12 Yes. Α 13 And what you told me in your deposition is that you 14 estimated 70 cents per ton to blend 4 million tons a year, 15 which is roughly 50 percent PRB and 50 percent CAPP coal; 16 correct? 17 Α Yes. That was in my direct testimony before I 18 obtained the coal yard specifications in the manual. But that's not really what you did in your 19 0 calculations of the blending costs in RS-27, is it, because 20 there you applied the four cents per million Btu blending costs 21 22 to the PRB tons only; correct? 23 Α That's correct. At that time that was my way of estimating what I thought the blending costs would be. 2.4

And by the way, you don't have a specific document to

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	back up the calculation that it would cost four cents per
	million Btu to blend PRB coals and CAPP coals; correct?
İ	A Now I have a specific document that tells the
	Commission it would cost nothing, and that is the coal yard
	specification and design manual.
	Q But when you came up with your estimate of four c
	per million Btu, you didn't have a specific document to bac

Q But when you came up with your estimate of four cents per million Btu, you didn't have a specific document to back up that calculation that it would cost four cents per million Btu to blend PRB coals and CAPP coals; correct?

A Actually I did. What I did was to take the IMT rate for blending versus the direct movement IMT rate that is without blending and take the difference and assume that was the blending cost. It was a specific set of rates that IMT had given.

Q Mr. Sansom, at Page 69 of your deposition, Lines 15 to 19, you were asked the following question and gave the following answer:

"Well, we're going to get to that. So you're telling me you have no document to back up that calculation; correct?"

Answer, "It's based on my knowledge and my experience, not a specific document."

Correct?

- A That was correct.
- Q Now, Mr. Sansom, it's also true that you cannot tell me that you have a quote from any facility in your exhibits or

documents where you have contracted for a service from a company or terminal to blend PRB tons and CAPP tons and obtained a calculation of that; correct?

A You're going, you're going to have to repeat that question.

Q Okay. Let me just shorten it a bit. You would agree with me that you personally have never contracted for a service from any company or terminal to blend PRB tons and CAPP tons and obtained a calculation of that; correct?

A I have not personally done that. That is correct.

Q Okay. Mr. Sansom, what I've shown you now is Exhibit Number 9, which was a deposition, deposition exhibit for you.

And if you would look at Exhibit Number 9 and if you compare the first six columns of this document, they're identical to the previous Document Number 8 and to your RS-27; correct?

A That's correct.

Q Now if we go over and move to Column H on this document there, if you take the total CAPP tons and million Btu value from your Column 2 minus the PRB Btu value from your Column 3, you will get the CAPP Btu value in your 50/50 blend, which divided by 25, representing the Btu value of the CAPP coal, you get 3.1 million tons of CAPP coal; correct?

A CAPP coal that was actually taken for Crystal River 4 and 5.

Q Now, Mr. Sansom, the CAPP coal calculation is

determining what amount of CAPP coal is in your blend with PRB in Column H; correct?

A Yes.

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- Q And the way we arrived at that was if you take Column 2, which is your total CR4 and 5 million Btu value of the total CAPP tons at CR5, 4 and 5 in Column 1; correct?
 - A Right.
- Q And if you take that column, Column 2, what you did to Column 3 is you determined the PRB value at 40 percent of the CAPP value; correct?
 - A Of the total Btus, yes.
- Q And using that value for the PRB value of the total Btus you were able to come up with the PRB tons in Column 4; correct?
 - A Yes.
- Q And if we do the same thing for the CAPP tons in your Btu value, we would take Column 2 minus Column 3 divided by 25 would give you the total CAPP tons in that value of the blend of PRB and CAPP as, on a Btu basis; right?
 - A Yes.
- Q Okay. And if you add, for example, looking in 1997, which is the first full year of your 50/50 blend, you have 2.4 million tons of CAPP coal coming in to CR4 and 5; correct?
 - A Yes.
 - Q And if you add that 2.4 million tons to your PRB tons

from Column 4 for 1997, which is 2.3 million tons, you would come up with a total of 4.7 million tons of PRB and CAPP coal in 1997; correct?

A Yes.

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Q And in Column J, if you applied the 70 cents per ton blending cost of 4 cents per million Btu that you used in RS-27 to the total tons of CAPP and PRB coals, it would mathematically come out to \$3,290,000; correct?

A Mathematically. But it is wrong for the reasons I pointed out. For example, Column A is wrong. And since I've now determined that no blending cost whatsoever would be borne, Column K is wrong, and the interim columns are also wrong because they embed an assumed blending cost that does not have to be borne to blend Powder River Basin coal and CAPP coal at Crystal River.

Q And, Mr. Sansom, you would agree with me that mathematically if you actually multiplied the 70 cents per ton times the total tons of CAPP in PRB to be blended in a 50/50 blend, you would get the values in Column J for the years 1996 to 2005; correct?

A And I repeat, mathematically that's correct, but conceptually and in practice the calculation is erroneous.

Q And if you mathematically applied the IMT rate and the 70 cents per ton charge to the total tons of CAPP and PRB to be blended rather than just the PRB tons, you would get the

result mathematically where your damages are only \$10,455,000; correct?

- A Mathematically, compounding those three mistakes, you would get that result.
- Q Now looking at the total PRB tons in 1997, for example, of 2.3 million, you have all those tons arriving by ocean barge; correct?
 - A That's correct.
- Q And you have a total of 2.4 million tons of CAPP coal you're bringing in 1997 by rail; correct?
 - A Yes.

- Q And that is in addition to the total rail deliveries for CR1 and CR2 which you did not review in this analysis; correct?
- A Not in this precise analysis. I reviewed the deliveries to Crystal River 1 and 2. I don't know what you mean, "did not." I'm aware that Crystal River 1 and 2 takes about 2 million tons a year; Crystal River 4 and 5, about 4 million tons a year.
- Q Okay. And you didn't do any analysis to determine what the cost would be to bring in the tons by rail under the CSX contract, did you?
 - A What tons?
 - Q The additional tons you're bringing in by rail.
 - A Well, if you do the calculation, in some years I'm

bringing more tons in by water than were brought in actually, and there would be some incremental tons that would have to come in by rail. And I've in the past reviewed the rail delivery capability of Crystal River, and it has the capability to deliver -- the actual total tonnage increase due to the lower Btu value of the PRB coal is about 700,000 tons a year, and that can easily be an additional delivery by the rail route. And I did check to make sure that the PRB tonnage moving by barge did not exceed the capability to move by barge 9 10 as demonstrated by past deliveries to Crystal River.

0 Mr. Sansom, if we could turn to Page 78, Lines 15 to 18, of your testimony where I asked the question, you gave the following answer:

"But you didn't do any analysis to determine what the cost would be to bring in the tons by rail under the CSX contract; correct?"

Answer, "No."

- Α That's correct.
- 0 That's accurate.

Now do you recall in your deposition where we discussed Mr. Putnam's calculation of how many tons of the 50/50 blend were needed in a 16-hour period?

Α Yes.

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And you agree that Mr. Putman said a little over 14,000 tons was required to match the current 12,000 tons of

Btu CAPP coal, and you thought that was low, didn't you? 1 No. And I was wrong. That was correct. I went 2 back -- you didn't put it before me, but after the deposition I 3 checked his calculation and Mr. Putman did it correctly. Because I was assuming you were going from pure PRB --5 100 percent CAPP to 100 percent PRB. Mr. Putman's calculation, 6 and I'd appreciate it at this time if you'd put it before me, 7 goes to a blend. So it only goes from 100 percent CAPP to 8 50 percent CAPP, 50 percent PRB, and he did the calculation 9 10 correctly. Well, turning to Page 125 and 126 of your deposition 11 0 where I asked you this question, you gave the following answers 12 13 to the questions: Question, "Do you happen to agree or disagree with 14 that statement?" 15 Answer, "If you want to give it to me, I'll do the 16 calculation. It sounds a little low." 17 Question, "The statement is, quote, with a 50/50 18 blend of 8,800 Btu PRB coal and 12,000 CAPP coal, a little over 19 14,000 tons will be required to match the current 12,000 tons 20 of 12,000 Btu CAPP coal." 21 22 Answer, "So the question is?" Question, "Do you agree with that statement?" 23 Answer, "No." 24 Question, "Why do you disagree with it?" 25

Answer, "I think if you use 24 million Btus per ton of CAPP coal, which is 12,000 Btus per pound, or 8,800 Buts per pound or 17.6 million Btus per ton, you would have to have 16,364 tons."

Question, "So that would be a difference between the 12,000 of over 4,000 tons."

Answer, "Yes."

Did you give those answers to those questions?

A Yes. And if you would put Mr. Putman's deposition or his testimony in front of me, I would, at this time I would -- I think I've explained to the Commission what I did.

Mr. Putman was going from a 100 percent CAPP coal to a 50/50 blend of Powder River Basin and CAPP coal. I was assuming that he was going from 100 percent CAPP coal to 100 percent PRB coal. That's why I mistakenly said that it didn't sound right. But I went back and reviewed it and Mr. Putman was correct.

Q Mr. Sansom, you told me in your deposition that using your calculation you would be talking about roughly 942,000 tons of additional tons of PRB in the blend -- I'm sorry, additional tons per year to burn the 50/50 blend of PRB. Do you recall that?

A Yes.

Q Okay. But if you look back at your exhibit or the last exhibit, Exhibit 9 where we walked through the total tons

blended for 1997, the highest year you had was 4.7 million tons compared to the original 4 million tons, which is only an additional 700,000 tons; correct?

A I think I've already testified that I did the calculation and the 700,000 tons are the incremental tons that would go to Crystal River 4 and 5 over the 100 percent CAPP recipe as opposed to the 50 percent CAPP/50 percent PRB recipe.

Q Mr. Sansom, I have a few more questions for you.

You mentioned in response to one of my questions that you said the rate at the IMT terminal should be 150, and I believe in your deposition you said 150 to 180 a ton; correct?

A Yes.

Q But if we look at RS-27 as it exists now in your direct testimony and we, all we did was add \$1.80 per ton for the terminaling charge to take the coal off the barge, unload it, store it and put it on the barge across the Gulf, your damages numbers would be less, wouldn't they?

A If you only make that change, you are correct. But as I point out in my rebuttal testimony, that change has to be made in conjunction with other changes.

Q Mr. Sansom, you also raised what you call the Mobile issue, but you would agree with me that --

A What? I'm sorry. The what?

Q The Mobile issue. But you would agree with me that you cannot point me to an analysis of PRB delivered by rail to

1	Mobile from the mine across the Gulf to Crystal River for the
2	years 1996 to 2005 in your direct or rebuttal testimony;
3	correct?
4	A You're going to have to slow down on that one.
5	You're saying I can't point to you PRB coal that
6	moved from Mobile, Alabama, to Crystal River?
7	Q My question was, you would agree with me that you
8	cannot point to an analysis of PRB delivered by rail to Mobile
9	from the mine across the Gulf to Crystal River for the years
10	1996 to 2005 in your direct or rebuttal testimony; correct?
11	A Yes. Well, I have an exhibit that addresses that
12	specifically. I think it's Number 20.
13	Q If we could go to your deposition, Page 133 carrying
14	over to 134.
15	A Excuse me. Can I get Exhibit 20 in front of me here?
16	Yes, Exhibit 20 addresses that.
17	Q Mr. Sansom, I asked you the following question in
18	your deposition starting at Page 133, Lines 22 to 25, and
19	carrying over to Page 134, Lines 1 to 6:
20	"So the answer to my question is you can't point me
21	to an analysis of PRB delivered by rail to Mobile from the mine
22	and across the Gulf to Crystal River for the years 1996 to 2005
23	in your direct or rebuttal testimony?"

were not transactions in every year, I did an illustrative

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Answer, "I think the answer to that is because there

calculation to make myself comfortable that that was the most economical route, but there was no data to do it every year from any FERC source."

Is that an accurate statement?

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A Yes. And just to clarify for the Commission, the illustrative calculation is at RS-20.

Q Mr. Sansom, you would agree with me that your damages calculations you did do in RS-27 is based on delivery from PRB down to the river to New Orleans and across the Gulf; correct?

A For the Davant period from 1996 through 2002, with one escalation in 2003. But for 2004 I capped the rate by the Mobile rate because I had a rail bed in March of 2003 to Mobile, and I used that to cap the price, excuse me, to cap the price via the IMT route. The theory being that if you were in a competitive solicitation and you wanted to find the least-cost coal delivered to Crystal River, you would compete the different routes of delivery. And the only way the 600 mile longer IMT PRB route could compete would be if it matched or beat the rate all rail to Mobile, which eliminates the river barge and one transloading to Mobile and then from thence (phonetic) in.

Q Mr. Sansom, if we would turn to Page 136 of your deposition, Lines 20 to 25, where I asked you the following question, you gave the following answer:

"Mr. Sansom, where have you done a calculation you

relied on to show -- the damages calculation you used in RS-27, you would agree, is based on delivery from PRB down to the river to New Orleans and across the Gulf; correct?"

A That's true.

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- O Answer, "Yes."
- A But the question is what disciplines the price in '03 and '04?
- Q And, Mr. Sansom, you would agree with me that you do not have the availability of good data for the delivered price calculation from the PRB area by rail to Mobile and across the Gulf to CR4 and CR5 for each of the years 1996 to 2005; correct?
- A I didn't -- can you repeat that? I thought you said if, and then I didn't hear the other shoe drop or maybe I misheard you.
- Q Mr. Sansom, my question was, you would agree with me that you do not have the availability of good data for the delivered price calculation from the PRB area by rail to Mobile and across the Gulf to CR4 and CR5 for each of the years 1996 to 2005; correct?
- A The key statement there is for each of the years. I don't think I need that. I do have good data with the Burlington Northern Santa Fe bid in March of 2003. If you couple that bid with the FOB mine price and the ocean barge rate in the exhibit that you put before me that you were, your

1	affiliate	was garnering from moving your tonnage across the
2	ocean, th	at's Exhibit 5, then you have a representative cost of
3	the deliv	ered cost of Powder River Basin coal to Crystal River
4	via Mobil	e, and that's what I attempted to do in RS-20.
5	Q	Mr. Sansom, if we could look at deposition Page 139,
6	Line 25,	carrying over to Page 140, Lines 1 through 7, where
7	the quest	ion was:
8		"So what you've done is and you do not have, as
9	you've te	stified here, the availability of good data for the
10	delivered	price calculation from the PRB area by rail to Mobile
11	and acros	s the Gulf to CR4 and 5 for each of the years 1996 to
12	2005; cor	rect?"
13		Answer, "I don't have it for each of the years based
14	on actual	transactions."
15		That was an accurate statement; right?
16	A	Yes.
17	Q	Thank you.
18		MR. WALLS: Could I have a moment, please?
19		CHAIRMAN EDGAR: You may.
20		MR. WALLS: I have no further questions.
21		CHAIRMAN EDGAR: Are there questions from staff?
22		MS. BENNETT: Yes, Madam Chair, there's a few.
23		CROSS EXAMINATION
24	BY MS. BE	NNETT:
25	Q	Mr. Sansom, I think I understood you in your opening

remarks to say that in the design of Crystal River 4 and 5 a

20 percent increase in cost was incurred to provide features

such as larger combustion chamber. Is that correct? Was that

a correct --

A That's correct. And let me explain to the Commission, because I think this is extremely important.

When we started burning Powder River Basin coal in boilers in the late '60s and into the early '70s, in particular in boilers in the Chicago area because the Chicago State

Implementation Plan required sulfur reductions earlier than even the Clean Air Act Amendments of 1970, they brought the Powder River Basin coal into those boilers and they had problems burning it in those boilers that had been designed for Illinois Basin coal, which runs about 11,300, 11,900 Btus a pound. Powder River Basin coal ran at that point between 8,800 and 9,300, the coal they took. So the boiler designers had a, had a problem because there was slagging and fouling in the fire box and in the convection passes.

So the two major, three major boiler manufacturers and designers in the United States, which were Combustion Engineering, Foster Wheeler, and Babcock & Wilcox, had a real problem because Powder River Basin coal was low sulfur coal, it was cheap, the utilities wanted to use it. They had to design a boiler that could use it without slagging and fouling that would be dependable and reliable. They did that in the 1970s.

This boiler was ordered in 1978 with two other 1 2 boilers, the one at Belle River in Michigan, which I'm intimately familiar with, and the one at Miller in Alabama 3 20 miles northwest of Birmingham. These are what we call big box boilers, much larger than the boxes for combustion in the 5 units designed for bituminous coal. And these were designed 6 specifically to handle Powder River Basin coal without a 7 derate, without fouling, without slagging, and they were 8 designed to get the coal in, more coal has to go in because of 9 your lower Btu of the Powder River Basin coal. So the Crystal 10 River unit was explicitly designed to handle this blend. And 11 if you visit the boiler and go the 16 stories, it is much 12 13 larger than many other boilers, almost all other boilers than these three I mentioned, in order to ensure that they could 14 15 burn the Powder River Basin coal in a 50/50 blend.

MR. BURNETT: Madam Commissioner, if I could object.

Mr. Sansom is pontificating on stuff that is well beyond and outside of the scope of any of his testimony, and Ms. Bennett has not even asked a question yet other than do you recall this topic. So I'd just note a general objection to the witness's pontificating before questions are asked on material outside of the scope of any of their testimony.

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MR. McGLOTHLIN: I would just like to note that the question inquired about the 20 percent additional cost of the boiler, and I thought his answer was responsive to that

1 question.

CHAIRMAN EDGAR: The objection is noted for the record. And, again, I would ask the witness to respond to the question that is asked.

Ms. Bennett, you may proceed.

BY MS. BENNETT:

Q Is it your testimony that the same electric energy that Progress actually generated at CR4 and 5 in 1996 through 2005 could have been generated using a smaller combustion chamber?

MR. WALLS: Objection. Lack of foundation.

CHAIRMAN EDGAR: Ms. Bennett?

MS. BENNETT: The question is a follow-up to the statement that the larger combustion chamber that Mr. Sansom referred to in his opening statement was available for Crystal River and could generate the electricity, and this is just a question to understand whether a smaller combustion chamber would also create the same amount of energy.

MR. McGLOTHLIN: I have a question for clarification. What fuel does your question assume, Ms. Bennett?

 ${\tt MS.}$ BENNETT: It assumes the 100 percent Btu.

MR. McGLOTHLIN: Bituminous?

MR. WALLS: I have one question that if I could ask the witness in voir dire, that would probably clarify my objection.

1	MR. BURNETT: Madam Commissioner, to be clear,
2	Mr. Walls this witness is being asked questions about boiler
3	performance. I believe that we would be entitled to a brief
4	voir dire to see if he even has the qualifications to speak on
5	that issue, irrespective of what he said in his opening.
6	MS. BENNETT: I think I can simplify this. I'm going
7	to withdraw the question.
8	CHAIRMAN EDGAR: So be it.
9	Ms. Bennett, any further questions?
10	MS. BENNETT: Just a couple more.
11	CHAIRMAN EDGAR: Okay.
12	BY MS. BENNETT:
13	Q On Page 17 of your direct testimony in Lines
14	10 through 19 you testify that information regarding Powder
15	River Basin coal was widely available in the 1990s; is that
16	correct?
17	A It was the most important single development in the
18	coal business in the 1990s. When you go from 200 million tons
19	to 440 million tons, that is a huge increase.
20	Q Was that true that information was widely available
21	of other coal prices including foreign coal?
22	A Oh, the information on coal prices is available, yes,
23	on both imported coal and Central Appalachian coal and Powder
24	River Basin coal. The prices your question is now prices.

Yes, that's correct. The prices.

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Q And one final question, Mr. Sansom, is it your testimony that Progress Fuel Corporation did not receive bids from Powder River Basin coal suppliers prior to 2001?

MR. WALLS: Objection. Calls for speculation.

CHAIRMAN EDGAR: Ms. Bennett.

BY MS. BENNETT:

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Q Let me continue by stating, based on the information that you have reviewed is it your testimony?

A They -- the only document we were able to get in discovery was a letter from Kennecott that did indicate they were willing to offer Powder River Basin coal. Despite the representation that Mr. Walls has made that these other producers were contacted, there's no document in the files reflecting the bids from these other Powder River Basin producers. So the only single document is one attached to Ms. Davis's testimony which she purports to say says that they didn't offer the coal, but a plain reading of the document is Kennecott said, yeah, we've got this coal, our portfolio includes this coal. But, of course, that's not what Progress Energy Florida was asking for.

MS. BENNETT: No further questions.

CHAIRMAN EDGAR: Mr. McGlothlin, can you give me an estimate of how much time you would like to use for redirect?

MR. McGLOTHLIN: Ten minutes.

CHAIRMAN EDGAR: Ten minutes? Okay. Then let's proceed.

REDIRECT EXAMINATION

BY MR. McGLOTHLIN:

Q Mr. Sansom, a preliminary question. Several questions and answers referred to a term called "market proxy." Would you describe what is meant by that term?

A I was using the term as described in a 1993 order by this Commission that applies to Central Appalachian coal. The order addresses a market proxy for the movement of Central Appalachian coal via PEF affiliates from upriver docks, i.e., on the Kanawha or the Upper Ohio, down the Ohio and Kanawha Rivers to the lower Mississippi River at its confluence with the Ohio down to New Orleans and IMT, and then from, after transloading at IMT, across IMT by ocean barge to Crystal River. That was the approved order.

There was a second order in 1994 applicable only to imported coal. There has never been to my knowledge any order applicable to Powder River Basin coal.

Q In response to a question you indicated that in your calculation you were using only the ocean component of the proxy. What is the significance of your use only of that component?

A Well, the answer is I determined that the best route for the coal would be via Mobile. And the only rate -- since I

had not conducted a solicitation nor had Progress Energy of ocean barge transportation from Mobile to Crystal River, I did a discovery question and asked them for the by year ocean barge rates that they were billing the ratepayers for from McDuffie, which they use infrequently, which is Mobile, and from New Orleans, and I got this document and that's the number I used.

Q In response to an earlier question, you mentioned that two of the Powder River Basin producers on a bid list also produced Appalachian bituminous coal. What is the significance of that?

A The significance is that since during this period Progress was only buying Central Appalachian coal, Arch and Peabody, who had Central Appalachian coal to offer and Powder River Basin coal to offer, were readily pacified by saying, we'll consider your bid for Central Appalachian coal. Whereas, Kennecott -- the interesting thing about the Kennecott letter is Kennecott didn't have any Central Appalachian coal, so they were interested in moving Powder River Basin coal. And then the two other producers that I mentioned were never solicited for Powder River Basin coal.

Q You were shown two documents in the nature of a table or spreadsheet, Exhibits 8 and 9 to your deposition. Turning to the one marked Exhibit 8 first, did you prepare that document?

A No.

1	Q Do you agree or accept the information or the
2	calculations that are depicted on it?
3	A Everything to the right of Column 6 is in error.
4	Q There's one called Column F with Capturing Correct
5	Delta. Do you regard that as something the Commission should
6	rely on?
7	A No.
8	Q Do you accept the premises underlying the
9	calculations to the right of your six columns?
10	A No. As I pointed out, there's two major flaws, the
11	use of the IMT rate and the blending number.
12	Q How about Exhibit 9 to your deposition? Did you
13	prepare that document?
14	A No.
15	Q You mentioned that there were some errors on this
16	document. Would you identify them?
17	A Yes. Column A is an error and the blending
18	assumption is an error, as I pointed out earlier.
19	Q There were some questions and answers regarding the
20	\$1.50 to \$1.70 offloading rate applicable to the coal delivered
21	to the TECO terminal. Do you recall that?
22	A Yes.
23	Q What impact on the calculation of overcharges, if
24	any, do you think that should have in the, in the analysis?
25	A It shouldn't have any because embedded in the river

1	barge rate that TECO was collecting was an amount per ton in
2	excess of \$4. And here I'm alluding to this Commission's
3	decision in the TECO case where they established a market rate
4	for the river movement from, from the Cook terminal to New
5	Orleans of \$3.60 a ton. So since in my analysis using the TECO
6	numbers I'm using an \$8 plus barge rate to go from the
7	transloading point for Powder River Basin coal in Southern
8	Illinois known as the Cook terminal to New Orleans, the exact
9	route that this Commission has addressed earlier and said the
10	market rate as opposed to the affiliate rate was \$3.60, then
11	I've got more than enough room in my estimate to handle a
12	\$1.50 to \$1.80 transloading rate.
13	MR. McGLOTHLIN: Those are all my questions.

CHAIRMAN EDGAR: Okay. Mr. McGlothlin, you have exhibits for this witness?

MR. McGLOTHLIN: Move 3 through 31.

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CHAIRMAN EDGAR: Okay. Exhibits 3 through 31 will be admitted into the record.

> (Exhibits 3 through 31 admitted into the record.) Mr. Walls.

MR. WALLS: Yes. I would like to move in the exhibits I showed Mr. Sansom into the record.

I object to those marked seven and MR. McGLOTHLIN: eight on the grounds that they were not prepared by the witness. He does disagree with the concepts. The utility has witnesses --

CHAIRMAN EDGAR: Mr. McGlothlin, I'm sorry. I need you to slow down. Give me a minute. Okay?

Okay. Do we need to mark all of these?

MS. HOLLEY: I think for -- to make the record clear, if it's Progress's intention to move them or to attempt to move them all into the record, that each document should be marked, given a number and a title so it's clear which document we're referring to.

CHAIRMAN EDGAR: Let's do that. And, Mr. Walls, I was not under the impression that you intended to admit these. So I would ask all of the parties from this point forward, if you would like to tender an exhibit for potential entering into the record, let's go ahead and mark it and label it as you pull it up and distribute it, which is the way we generally do things. So I apologize for not clarifying that also on my part. But let's go ahead and start there.

So bear with us, and then, Mr. McGlothlin, I will come back to you and ask you to reiterate again the objection that you were going to raise.

Okay. So we started with Exhibit 207, which we marked. So the next one would be 208. And, Mr. Walls, work with me here. What I have as the next exhibit that you offered or that you distributed begins with a Paragraph 16?

MR. WALLS: Yes.

1	CHAIRMAN EDGAR: Okay. So we will mark that as 208.
2	And I will ask you for a title.
3	MR. WALLS: This is Mr. Sansom's calculation of the
4	Gulf barge Btu adjustment in response to an interrogatory.
5	(Exhibit 208 marked for identification.)
6	CHAIRMAN EDGAR: Okay. And then the next exhibit,
7	what I have is a two-line chart that says Progress Fuels
8	Corporation Water Transportation Rates in the corner. Is that
9	correct?
10	MR. WALLS: That's correct.
11	CHAIRMAN EDGAR: Okay. So that will be 209. Does
12	that work as a title, the information in the corner?
13	MR. WALLS: That work fines.
14	CHAIRMAN EDGAR: Okay. We'll label it Progress Fuels
15	Corporation Water Transportation Rate.
16	(Exhibit 209 marked for identification.)
17	Okay. And then next I have on legal size paper
18	now this does say confidential at the top. Is it?
19	MR. WALLS: It's no longer confidential,
20	Commissioner, because it's past data.
21	CHAIRMAN EDGAR: Okay. So this will be 210. And can
22	you give me a title, please?
23	MR. WALLS: I think the one in the upper left-hand
24	corner should work fine: Electric Fuels Corporation Water
25	Transportation Costs

(Exhibit 210 marked for identification.) 1 2 CHAIRMAN EDGAR: Okay. And then next I have also on legal-sized paper a chart that says Fuel Damages Summary in the 3 left-hand corner. Is that next for you? 4 5 MR. WALLS: Yes. CHAIRMAN EDGAR: Okay. And that will be 211. 6 Fuel Damages Summary, is that sufficient for a title? 7 8 MR. WALLS: Yes, that will be fine. (Exhibit 211 marked for identification.) 9 CHAIRMAN EDGAR: Okay. Okay. And then 212 is next, 10 11 which is a one-page -- and it also says Fuel Damages Summary. 12 Can you --13 MR. WALLS: This is the blending costs. 14 CHAIRMAN EDGAR: The blending costs. 15 (Exhibit 212 marked for identification.) 16 Okay. Have we marked all of them? 17 MR. WALLS: Yes. 18 CHAIRMAN EDGAR: Okay. Okay. Mr. McGlothlin, and if can you use these numbers that we have just given so I can try 19 to be clear. 2.0 MR. McGLOTHLIN: My objections are to the documents 21 22 marked 211 and 212. I have no objection to the earlier 23 documents. CHAIRMAN EDGAR: Okay. Then let's go ahead and admit 24 207, 208, 209 and 210 into the record. 25

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(Exhibits 207 through 210 admitted into the record.)

And if you could tell me again your objections to

211 and 212.

MR. McGLOTHLIN: First of all, as the witness made clear, he did not prepare these documents. He disagrees with the concepts and assumptions in them. They are intended to be assertions of a position by someone other than the witness, assertions with which he disagrees, and the most compelling indication of that is that on each document there's a column labeled Correct Delta, which indicates that it's being proffered for the proposition that it has the information different from the witness's own calculations that should be substituted for his. He does not sponsor these documents. He disagrees with them. The company had opportunities to sponsor testimony and exhibits reflecting their analyses and their assumptions. They have done so. It's inappropriate to have this witness, or attempt to have this witness sponsor calculations with which he disagrees, that he did not prepare and that he says are replete with errors and poor assumptions.

CHAIRMAN EDGAR: Mr. Walls.

MR. WALLS: Yes. In response, first, I'm aware of no evidentiary objection that says a witness has to prepare a document. And, in fact, if you look at Mr. Sansom's direct and rebuttal testimony, it's replete with documents he didn't prepare.

Second, Mr. Sansom agreed with the mathematical 1 2 calculations in both of these exhibits, that they were mathematically correct, calculated correctly. If he disagrees 3 with the concepts, that goes to the weight of the testimony. 5 We understand he disagrees with including an IMT charge, but he 6 also admitted that there's no such transloading charge in his damages summary, and we simply included the one in the documents that have been produced and identified and used by 9 PEF over the years. He agreed that the mathematical 10 calculation is correct and that these would be the result if 11 you make those changes.

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On the second one he agreed in his testimony that he would -- he was purporting to apply the blending cost to the total tons. What he did in his exhibit, RS-27, was only apply it to the PRB tons. So what the Exhibit 9 shows is using his same calculation of 70 cents per ton that he used in his direct testimony, what the result would be if you actually applied that 70 cents per ton to the total tons. Again, if he disagrees with the concept, it goes to the weight.

CHAIRMAN EDGAR: Mr. McGlothlin, any further comment?

MR. McGLOTHLIN: Well, the column captioned Correct

Delta indicates that they're offering this for more than having him agree with the math, and that's my objection.

CHAIRMAN EDGAR: I'll look to our legal staff.

MS. BENNETT: It's my understanding that Progress may

1 have been offering this as impeachment, but you might want to clarify whether they're offering it as impeachment or for 2 substantive purposes. 3 CHAIRMAN EDGAR: Mr. Walls. MR. WALLS: Of course we're offering it for 5 6 impeachment. That's the purpose of cross-examination. 7 CHAIRMAN EDGAR: Ms. Bennett. 8 MS. BENNETT: And so for impeachment purposes I believe it would be admissible and can be given the weight that 9 10 the Commission decides it deserves based upon the testimony presented and the document itself. 11 12 CHAIRMAN EDGAR: Understood. And so I will allow the documents to be entered in. 211 and 212 will be entered into 13 14 the record. The objections are noted for the record as well. (Exhibits 211 and 212 admitted into the record.) 15 16 And the witness is excused. Thank you. We will see 17 you again later. 18 And, Mr. McGlothlin, let's go ahead and take up the 19 testimony and exhibits for Ms. Merchant. Well, pursuant to the stipulation, I 20 MR. McGLOTHLIN: 21 move the prefiled testimony in evidence as though read, as well as Ms. Merchant's exhibit. 22 23 CHAIRMAN EDGAR: Okay. The prefiled testimony of

Witness Merchant will be entered into the record as though

read, and Exhibit Number 32 will be entered into the record.

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1			(Exhibit	32	marked	for	identification	and	admitted
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1		(REVISED) DIRECT TESTIMONY
2		OF
3		PATRICIA W. MERCHANT, CPA
4		On Behalf of the Office of Public Counsel
5		Before the
6		Florida Public Service Commission
7		Docket No. 060658-EI
8		
9	Intro	duction
10	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
11	A.	My name is Patricia W. Merchant. My business address is Room 812, 111
12		West Madison Street, Tallahassee Florida, 32399-1400.
13		
14	Q.	BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR
15		POSITION?
16	A.	I am a Certified Public Accountant licensed in the State of Florida and
17		employed as a Senior Legislative Analyst with the Office of Public Counsel
18		(OPC). I began my employment with OPC in March, 2005.
19		
20	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
21		PROFESSIONAL EXPERIENCE.
22	A.	In 1981, I received a Bachelor of Science degree with a major in accounting
23		from Florida State University. In that same year, I became employed with the
24		Florida Public Service Commission (PSC) as an auditor in the Division of
25		Auditing and Financial Analysis. In 1983, I joined the PSC's Division of

1		Water and Sewer as an analyst in the Bureau of Accounting. From May, 1989
2		to February, 2005 I was a regulatory supervisor in the Division of Water and
3		Wastewater which evolved into the Division of Economic Regulation.
4		
5	Q.	ARE YOU SPONSORING ANY EXHIBITS IN THIS CASE?
6	A.	Yes. I am sponsoring two exhibits, which are attached to my testimony.
7		Exhibit PWM-1 is a summary of my regulatory experience and qualifications.
8		Exhibit PWM-2 is entitled Calculation of Interest on Excess Fuel Charges to
9		be Refunded by Progress Energy Florida.
10		
11	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE FLORIDA
12		PUBLIC SERVICE COMMISSION?
13	Α.	Yes, I have testified numerous times before the PSC. I also have testimony
14		filed in Docket No. 060365-EI, the Petition to recover natural gas storage
15		project costs through fuel cost recovery clause by Florida Power & Light
16		Company. I have also testified before the Division of Administrative
17		Hearings as an expert witness.
18		
19	Q.	WHAT IS THE PURPOSE OF YOUR REVISED TESTIMONY?
20	A.	On October 18, 2006, I submitted prefiled testimony containing a calculation
21		of the interest that should be associated with the refund by Progress Energy
22		Florida Inc. (PEF) of excessive fuel charges that OPC witness Robert Sansom
23		identified and quantified. After I made my calculation, Mr. Sansom modified
24		the excessive fuel charges slightly, increasing the total amount of overcharges
25		supported by his testimony from \$132,939,574 to \$134,523,343. The purpose

1		of my revised testimony is to calculate the interest component that conforms
2		to the refund proposed by Mr. Sansom in his prefiled testimony. Accordingly,
3		I have updated the exhibit that I attached to my earlier testimony. The revised
4		Exhibit (PWM-2) also contains two pages that were inadvertently omitted
5		from the first version.
6	Q.	PLEASE EXPLAIN HOW YOU MADE YOUR INTEREST
7		CALCULATION ON MR. SANSOM'S RECOMMENDED REFUND
8		AMOUNTS.
9	A	I took the annual amounts of excess coal costs calculated by Mr. Sansom as
10		reflected on page 52 of his testimony. For 1996, I applied the 1996 annual
11		average commercial paper rate to calculate the interest on the excess fuel
12		charges for that year. I then added that interest to the 1996 amount of excess
13		charges to reflect the 1997 beginning balance of overcharged costs. For each
14		successive year, I added the annual amount of excess fuel costs to the
15		beginning balance (the prior year's ending balance plus annual interest
16		expense) and applied the annual average commercial paper rate to that year. I
17		have reflected this calculation in Exhibit PWM-2, page 1 of 3.
18		
19	Q.	WHAT INTEREST RATE DID YOU APPLY IN YOUR
20		CALCULATIONS?
21	A.	I used the 30-day commercial paper rate that is required to be applied to
22		refunds by Rule 25-6.109(4)(a), Florida Administrative Code. I received
23		these rates from the Commission staff, who compile the monthly 30-day
24		commercial paper rates as reported in the Wall Street Journal on the first
25		business day of each month. I then took the monthly average interest rates for

1		each year and calculated an annual average interest rate. I used an annual
2		average interest rate because I only have annual refund amounts, not monthly
3		amounts. I reflect the monthly average 30-day commercial paper interest rates
4		and my annual averages in Exhibit PWM-2, pages 2 and 3.
5		
6	Q.	HOW DID YOU DETERMINE THE INTEREST RATE TO USE FOR
7		2006?
8	A.	I took the monthly average interest rates for January through September and
9		calculated a nine-month average interest rate. I applied this average rate the
10		beginning balance of excess fuel charges in 2006 and calculated a full year of
11		interest. When the final refund is made, this nine-month average should be
12		replaced with the actual monthly average rates for October 2006 through the
13		date of the refund.
14		
15	Q.	WHAT IS THE TOTAL AMOUNT OF INTEREST THAT YOU HAVE
16		CALCULATED ON THE EXCESS FUEL COSTS FROM 1996 TO THE
17		END OF 2006?
18	A.	Based on my calculations, the total interest on the excess fuel costs is
19		\$22,491,279. The cut-off date of my calculation is December 31, 2006.
20		Adding this interest to the amount recommended by Mr. Sansom of
21		\$134,523,343, reflects a total amount of excess fuel and interest costs of
22		\$157,014,622.
23		
24	Q.	DOES THIS COMPLETE YOUR REVISED TESTIMONY?
25	A.	Yes, it does.

1	CHAIRMAN EDGAR: And with that, I'd say it's time
2	a lunch break. 12:35 by the clock on the wall. Let's come
3	back at 2:00, and we are on lunch break.
4	(Lunch recess taken.)
5	(Transcript continues in sequence with Volume 2.)
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1	STATE OF FLORIDA)
2	: CERTIFICATE OF REPORTER COUNTY OF LEON)
3	
4	I, LINDA BOLES, RPR, CRR, Official Commission
5	Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.
6	IT IS FURTHER CERTIFIED that I stenographically
7	reported the said proceedings; that the same has been transcribed under my direct supervision; and that this
8	transcript constitutes a true transcription of my notes of said proceedings.
9	I FURTHER CERTIFY that I am not a relative, employee,
10	attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorneys or counsel
11	connected with the action, nor am I financially interested in the action.
12	DATED THIS day of April, 2007.
13	
14	LINDA BOLES, RPR, CRR
15	FPSC Official Commission Reporter (850) 413-6734
16	(050) 415 0754
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