352

1 BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

2

DOCKET NO. 070703-EI

3

In the Matter of:

4

REVIEW OF COAL COSTS FOR PROGRESS

5 ENERGY FLORIDA'S CRYSTAL RIVER

UNITS 4 AND 5 FOR 2006 AND 2007.

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9 VOLUME 3

10 Pages 352 through 478

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14

PROCEEDINGS: HEARING

15

BEFORE: CHAIRMAN MATTHEW M. CARTER, II

16 COMMISSIONER LISA POLAK EDGAR

COMMISSIONER KATRINA J. McMURRIAN

17 COMMISSIONER NANCY ARGENZIANO

COMMISSIONER NATHAN A. SKOP

18

DATE: Tuesday, April 14, 2009

19

TIME: Commenced at 9:40 p.m.

20

PLACE: Betty Easley Conference Center

21 Room 148

4075 Esplanade Way

22 Tallahassee, Florida

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APPEARANCES: (As heretofore noted.)

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1 I N D E X

2 WITNESSES

3

NAME: PAGE NO.

4

DAVID J. PUTMAN

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Cross Examination by Mr. Burnett 355

6 Redirect Examination by Mr. McGlothlin 424

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1 EXHIBITS

2 NUMBER: ID. ADMTD.

3 55 Staff's 2nd Interrogatory 380

No. 24, Docket 090001

4

56 Indonesian Coal Price 386

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57 Effects of Blending Sodium 447

6 in Coal

7 58 Sulfur Evaluation Treatment 463

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

2 (Transcript follows in sequence from

3 Volume 2.)

4 CHAIRMAN CARTER: Good morning. I'd like to

5 call this hearing to order. When last we left, we were

6 getting ready for Mr. Burnett to begin his

7 cross-examination. Good morning, sir. You are

8 recognized.

9 MR. BURNETT: Thank you, sir.

10 DAVID J. PUTMAN

11 continues his testimony under oath from Volume 2:

12 CROSS EXAMINATION

13 BY MR. BURNETT:

14 Q. Good morning, Mr. Putman.

15 A. Good morning.

16 Q. Mr. Putman, what's a Btu?

17 A. It is a measure of chemical energy that can be

18 converted into heat.

19 Q. And you admit that Crystal River Units 4 and 5

20 individually need at least 11,000 Btus to meet full load

21 capacity of those plants; correct?

22 A. That is the testimony, and the design would

23 indicate that. Yes.

24 Q. And you agree that if the coal that PEF buys

25 does not meet the Btu criteria needed to obtain full

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1 load capacity, PEF has to get those Btus from somewhere

2 else; correct?

3 A. No, I wouldn't exactly agree with the way you

4 phrased that. That -- the coal that's burned on an

5 ongoing basis does require that kind of 11,000 or maybe

6 even a little higher than that based on the testimony

7 last time, but it requires a Btu level going into the

8 boiler on an ongoing basis in order to maintain full

9 load during that hourly time period. If you're

10 questioning about -- I'm sorry. Go ahead. I won't go

11 into that.

12 Q. No, sir. Please finish your answer.

13 A. I was going to say if you're talking about an

14 annual basis, that's one thing. If you're talking about

15 an hourly basis, that's another.

16 Q. Well, this may be a long day, Mr. Putman.

17 Let's turn to Page 57 of your deposition. And when I

18 asked you the question, the same one I just read you,

19 "And you would agree with me that if the coal that PEF

20 buys does not meet the Btu criteria needed to obtain

21 full load capacity, it has to get those Btus from

22 somewhere else; right?" Your answer, "That's correct."

23 A. Okay.

24 Q. Did I read that correctly, sir?

25 A. I'm sure you did. I don't, I don't have my

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1 deposition in front of me. I'm sorry. But I will

2 accept what you read.

3 Q. Okay. It looks like you're getting a copy

4 now.

5 And going on, sir, to get in my, my little

6 example I did, to get those additional 2,000 Btus, PEF

7 would have to buy coal; right?

8 A. You said something about a little example.

9 What example?

10 Q. Yes, sir.

11 A. I'm sorry.

12 Q. I just said that if PEF needs 11,000 and they

13 only have 9,000, those Btus aren't going to appear out

14 of thin air; correct? We have to buy something to get

15 those Btus to get in the plant; correct?

16 A. Again, I'm really not trying to be difficult,

17 but 11,000 Btus is a measure of a heat available in

18 coal. If it's 11,000 Btus per pound, that's a measure

19 of Btus in the coal. If you're talking about 11,000

20 Btus just by themselves, I honestly don't have a

21 reference point for what that means.

22 Again, if you're talking about 11,000 Btus per

23 pound of coal, that's the amount of quality of coal you

24 need to be putting into the boiler on an ongoing, steady

25 basis in order to generate full load. Yes. That's --

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1 and if, I mean, you can't just go buy -- if you're only

2 putting in 9,000 Btus per pound into the boiler, you

3 can't go buy 2,000 Btus and make that up. I mean -- I'm

4 sorry. I'm --

5 Q. Were you, were you finished, sir?

6 A. Yes.

7 Q. Okay. And I want to give you your point of

8 reference. Let's go back to your deposition again when

9 I asked you, Page 57, Line 16, "So, for example, if they

10 bought just a 9,000 Btu coal and they needed 11,000,

11 they'd have to make those Btus up somewhere; right?"

12 Your answer, "Correct." "And those Btus, they just

13 won't come out of thin air. You've got to buy something

14 to get them; right?" Your answer, "Correct." Did I

15 read that properly?

16 A. Yes.

17 Q. Thank you, sir.

18 Now you remember Exhibit 2 from your

19 deposition; correct? It looks like this. It's in the

20 blue packet in front of you, and that was handed out to

21 the Commission yesterday.

22 A. Okay.

23 Q. And at Pages 64 to 67 of your deposition we

24 walked through this exhibit and you confirmed that my

25 math was correct, did you not?

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1 A. Yes.

2 Q. And you would agree with me that this is a

3 simple illustration of the Btu topic we were just

4 discussing; right?

5 A. Again, I think we were both operating on the

6 assumption, I know I was, in answering your questions

7 that when we talked about Btus, we were talking in terms

8 of Btus per pound. We were short-handing Btus per

9 pound. It's the quantity -- quality of coal. And if I

10 didn't make myself clear in the deposition, I apologize.

11 But I, I mean, yes, Btus per pound is what I was talking

12 about, had in mind, and I shorthanded that when I said

13 1 Btu compared to one ton.

14 Q. Okay. Well, Mr. Putman, you would agree with

15 me that we agreed in your deposition that in my simple

16 example if 1,000 times of this coal blend equals 2,000

17 Btus and 1,000 times of this coal blend equals

18 1,500 Btus, that if your objective is to reach 2,000

19 Btus, if you use this blend that only has the 1,500,

20 you're going to have to buy some more coal. Didn't we

21 agree to that?

22 A. Yes.

23 Q. Okay. Now I'd also like to turn to my big

24 blowup here of your Exhibit DJP-7. It's also in the

25 handout materials.

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1 MR. McWHIRTER: Excuse me for interrupting,

2 but could we identify these demonstrative exhibits in

3 some fashion in case we need to refer to them in a

4 subsequent pleading?

5 MR. BURNETT: I -- this was -- the first one I

6 showed was late-filed, I'm sorry, Exhibit 2 to Mr.

7 Putman's deposition. And as I just said, sir, this is

8 Exhibit 7 to his prefiled testimony.

9 MR. McGLOTHLIN: John, is that the original or

10 the revised 7?

11 MR. BURNETT: Original.

12 BY MR. BURNETT:

13 Q. Are you with me, Mr. Putman?

14 A. I am.

15 Q. And much like the simple example that we just

16 went over, we talked about in your deposition the fact

17 that while your tons matched up in your two examples,

18 your Btus did not. Do you remember that?

19 A. Yes.

20 Q. And at the end of that when we talked about it

21 in your deposition, you agreed with me that if your

22 objective is to make the Btus match, you would need to

23 buy some more coal; correct?

24 A. That would be correct.

25 Q. You also agree with me that when we were

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1 talking about these issues in your deposition, your

2 original position was that this Commission in Docket

3 060658 only cared about the weight of coal coming into

4 Crystal River and not about the Btu values that the coal

5 would have; isn't that right?

6 A. That was my position and I would say it is

7 still my position.

8 Q. I'm sorry, sir. You said it's still your

9 position?

10 A. Yes.

11 Q. Well, as I asked you more questions in your

12 deposition, you backed off that position and admitted

13 that this Florida Public Service Commission has never

14 said that it would be prudent or wise for PEF to ignore

15 the Btus it needs to run Crystal River Units 4 and 5 and

16 to just make sure a certain amount of weight arrived at

17 the plant, didn't you?

18 A. And I would still agree with that position

19 too.

20 Q. So you would admit, sir, that if I have a

21 certain amount of tons of rock show up at Crystal River,

22 this Commission is not going to be satisfied that I just

23 bought a certain amount of weight of rock to run those

24 plants; right?

25 A. I would agree with that hypothetical.

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1 Q. Now after, after I took your deposition and

2 after my company filed its rebuttal testimony, I think

3 we've all acknowledged that you had filed an amendment

4 to your testimony; correct?

5 A. Correct.

6 Q. And now you give two alleged total damages

7 numbers in your amended testimony, but you're careful to

8 admit that the lower number of $33,971,584 is based on a

9 methodology that is consistent with the assumptions that

10 the Commission laid -- made in the last case; correct?

11 A. No, I'm not agreeing with that. Discussions

12 that occurred after the depositions and other issues

13 focused me in on the methodology needed to come up with

14 a solution to a specific time frame, a specific set of

15 issues in order to capture all the values in that

16 package. That's what was needed to be presented to the

17 Public Service Commission. And so that is why in my

18 original case in going through all the discussions that

19 went on in the prior case, all the discussions were

20 about the needs of the blend, what size blend we were

21 going to have. A lot of discussion boiled down to a

22 20 percent, 30 percent blend and finally ended up as a

23 20 percent blend. All that focus was on tonnage blend

24 by weight. There was not any discussion about the need

25 to have a total number of Btus arrive at the plant on an

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1 annual basis. It was all about the percentage by weight

2 of the blend.

3 So when I went through my calculation, my

4 analysis, I very carefully pursued having a 20 percent

5 blend based on weight. But then when I got to the

6 Exhibit A in that order, there was a different equation,

7 different math that was based on balancing Btus

8 absolutely. And so that created a tension in my

9 analysis that said what's the most important thing the

10 Public Service Commission was focused on, was it weight

11 or was it balancing, balancing tons or balancing Btus?

12 When I analyzed it, did my first analysis, I

13 said that they were after the 20 percent by weight

14 blend. If you use an approach where you replace a high

15 Btu ton with a lower Btu ton, the tons are tons and you

16 end up with a by weight blend match but you don't end up

17 with as many Btus on the barge. Absolutely. So, yes,

18 in order to make up those Btus that do not arrive at the

19 plant on that barge, you have to go out and buy more

20 Btus. But if you match the Btus, you don't end up with

21 a 20 percent blend. You end up with something less than

22 a 20 percent blend.

23 So my first calculation was based on the

24 20 percent by weight. But then that left a need for

25 coal in order to make a nice complete package, and so

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1 after much discussions I recognized the need in order to

2 solve this particular problem to make those Btus

3 balance. So I went in and calculated two different ways

4 to make up those Btus. One way is you could make them

5 up with all high-cost bituminous coal or you could get

6 more of the blend coal, 20/80 blend. And you would end

7 up buying more total coal either way, but you would end

8 up with balancing the Btu needs at the plant.

9 My original concept was that, yes, you've got

10 to buy Btus, but those Btus can come lots of different

11 places that make up Btus. You could buy them delivered

12 by rail, you could buy more waterborne Btus, you could

13 buy higher Btu coal to make up, or maybe because of

14 changes in the needs of the plant the plant doesn't end

15 up needing the Btus you expected to need. Maybe the

16 units go offline more than expected, maybe economic

17 situations change and the burn is lower so you don't end

18 up needing to replace all those Btus.

19 So that was my original concept and why I was

20 comfortable balancing tons because I read that that's

21 what the Public Service wanted, but I changed it and

22 balanced the Btus to make a nice complete package. Long

23 answer, but that's the history.

24 Q. Thank you, sir. Now if we could get back to

25 my question. My question was that in your amended

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1 testimony you have two proposed numbers; correct?

2 A. That's correct.

3 Q. Okay. And the first of those proposed numbers

4 appear on Page 4 of your amended testimony; isn't that

5 correct?

6 A. Yes.

7 Q. And that number is $33,971,584; correct?

8 A. Yes.

9 Q. Did you say yes, sir?

10 A. Yes.

11 Q. Okay. And on Page 4 of that same testimony at

12 Line 21 you called this 33 million and some odd dollars

13 number the all bituminous approach, do you not?

14 A. Yes.

15 Q. And then if you turn back to Page 2 of your

16 amended testimony at Line 23, you say, "One way is to

17 assume that they would consist of the same highest

18 costing tons of bituminous coal actually delivered that

19 the comparison methodology identifies as the coal that

20 the alternative would displace. That appears to be the

21 assumption underlying the refund made in the last case,

22 and I have made my calculation on that basis." Correct?

23 A. That's correct.

24 Q. Thank you.

25 Now using rough math in your lower number that

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1 we just talked about of approximately $33,900,000,

2 that's about a 45 percent reduction in your alleged

3 damages from your first testimony, isn't it?

4 A. I did not run that percentage, but I'll trust

5 you.

6 Q. Well, I agree with you, lawyers shouldn't do

7 math, should they?

8 Assuming my math is correct, a 45 percent

9 reduction, that's a dramatic reduction in your damages,

10 isn't it?

11 A. Again, that would be your term. It's a big,

12 it's a big change.

13 Q. Bear with me one second.

14 Actually it's not my term, Mr. Putman. If you

15 would turn to Page 11 of your deposition, at Line 4 I

16 say, "And I believe you even characterize this

17 40 percent difference as being dramatic in Lines 5 and 6

18 of your original testimony." And your answer is,

19 "40 percent is dramatic." Did I read that correctly?

20 A. Yes. Okay.

21 Q. So 45 percent would be equally dramatic,

22 wouldn't it?

23 A. Yes.

24 Q. Thank you. By the way, sir, in your amended

25 testimony are you assuming that any of the coal that PEF

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1 would buy under your theory would be blended at the

2 Alabama State Docks near Mobile, Alabama?

3 A. Yes.

4 Q. And at least at the time of your deposition

5 you didn't know whether or not PEF even has a contract

6 that allows for blending at those docks, did you?

7 A. I did not know, and it would not have made a

8 difference in my assumptions.

9 Q. Well, let me understand that. Are you saying

10 that you're assuming that we would bring coal to a dock

11 and blend it, but it doesn't matter to you whether we

12 have the right to blend it or not?

13 A. I assume that you could get a right to blend

14 it at Alabama State Docks.

15 Q. Well, you would agree with me that if PEF does

16 not have that right in real life, then that would be a

17 problem we would have to overcome and that that would be

18 a problem in your amended testimony as well; correct?

19 A. We're getting into the whole hypothetical

20 issue is, I mean, you did not have the right to burn the

21 coal in the first place. So now we're talking about the

22 hypothetical need to have a contract to blend the coal

23 that you couldn't burn. So all those hypotheticals make

24 it very difficult to head down that line.

25 But, yes, it would be something -- if you

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1 could have burned the coal, if you'd had the permit, you

2 would have had to get a contract to blend some of that

3 coal based on the numbers that existed in order to blend

4 it at the state docks. Yes.

5 Q. Okay. Well, I want to be very clear because I

6 heard Ms. Bradley commend the Office of Public Counsel

7 when we started about candor and admitting mistakes when

8 they're made. And I think you even agreed with me in

9 your deposition that if you have an error or mistake in

10 your testimony, it's very important to go back and

11 correct it, didn't you?

12 A. Yes. I would agree with that today.

13 Q. Okay. And I guess my question is if you've

14 made an assumption in your amended testimony that

15 assumes my company has the right to blend at the Alabama

16 State Docks and this Commission hears evidence from

17 another witness saying we do not have that right as a

18 matter of contract and a matter of reality, wouldn't you

19 agree with me that you need to go back and fix your

20 amended testimony based on the pure reality?

21 A. The realities -- it's a hypothetical set of

22 circumstances about what you would do if you had

23 actually bought the coal and you needed to blend

24 20 percent. If you were buying coal at IMT that did not

25 give you enough coal to blend 20 percent and you were

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1 buying other coal at Mobile and you wanted to blend at

2 Mobile in order to get a full 20 percent blend, save the

3 customers the most money, then, yes, you would have to

4 get a contract under those hypothetical set of

5 circumstances.

6 Q. Okay. And I just want to be abundantly clear.

7 I'm going to try it one more time. You've read

8 Mr. Weintraub's testimony, and if he testifies that we

9 do not have a contract to blend at that dock and you've

10 assumed that in your analysis, don't you need to go back

11 and correct that in your hypothetical amended testimony?

12 A. I do not think I need to amend that in a

13 hypothetical circumstance.

14 Q. Okay. Well, I'd like to continue to talk to

15 you about some other issues that you do not address in

16 your recently amended testimony, recently filed amended

17 testimony.

18 You fully admit that in conducting your

19 analysis in this case you used forecasted SO2 allowance

20 prices for 2006 and 2007 instead of actuals, don't you?

21 A. In following the methodology in the prior

22 case, I use that same approach, yes.

23 Q. Okay. And when Ms. Bennett was talking to you

24 in your deposition about whether you had the

25 availability to get those actuals instead of outdated

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1 projections, you stated that you did not have them, but

2 all anyone needed to do to get them was to pull them off

3 the Internet; right?

4 A. That's correct.

5 Q. And wouldn't you agree with me that if this

6 Commission is determining whether or not to make my

7 company pay millions of dollars in alleged damages, it

8 should consider what things actually costed in 2006 and

9 2007 rather than what someone projected they should cost

10 in 2004?

11 A. I guess I'm a little surprised that you're

12 taking that position because it sounds like the classic

13 definition of hindsight review, which is my

14 understanding something utilities and I know my

15 utilities would not have ever liked that. And that is

16 to look back on a decision made at a point in time and

17 decide that that decision was more right or more wrong

18 based on the way the world turned out later.

19 My understanding of prudency reviews are that

20 decisions are reviewed based on the facts and

21 circumstances known at the time the decision was made or

22 should have been made and not to hold the decider to

23 some set of circumstances that occurred later on,

24 whether those circumstances turn out to be better or

25 worse for the decision. You look at what was known at

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1 the time the decision was made. And so that's what I

2 did. I used the information that was available at the

3 time the decision was made to forecast the numbers.

4 Q. Well, Mr. Putman, let me ask you this. If

5 we're dealing with prudency in real life, shouldn't we

6 do what Commissioner, Commissioner Skop suggested

7 yesterday and ignore this whole paradigm and just focus

8 on what actually happened vis-a-vis 29A that shows that

9 my company beat all the prices of what it could actually

10 have done with PRB coal? Shouldn't we abandon this

11 made-up scenario altogether and just focus on reality?

12 A. No. I think that would be a mistake for a

13 long-term way to run this business. I agree that

14 hindsight review is not a good thing to do. I think

15 prudency reviews should be based on what's known at the

16 time the decisions are made, and I think it would be a

17 serious change of course for the Commission to focus on

18 hindsight review decision-making.

19 Q. Okay. Well, if you want to stick then in the

20 made-up scenario, my question was simply shouldn't this

21 Commission use actual prices rather than projections

22 that were proven to be wrong by the actuals?

23 A. I don't agree with that.

24 Q. Okay. Continuing with the issue of SO2,

25 you're aware that Mr. Weintraub and Mr. Heller have

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1 accused you of double-counting or double-dipping in your

2 alleged SO2 allowance damages; correct?

3 A. I know they accuse me of that, yes.

4 Q. Okay. And are you further aware that the

5 basis for their accusations are that PEF's coal

6 evaluation process accounts for SO2 allowance costs when

7 coals are first evaluated and ranked?

8 A. I never became convinced of that despite a

9 strong effort to find out how the Vista model and how

10 their non-Vista evaluation process handles sulfur.

11 Despite efforts to ask for Vista input sheets and output

12 sheets, all we received were the evaluation spreadsheets

13 that we looked at yesterday for both '06 and '07. And

14 so it was never clear to me what, how those models

15 handled sulfur.

16 Q. Well, let me get this straight. It was never

17 clear to you how the models work, but nonetheless you

18 filed testimony alleging first $61 million and now

19 $33 million when you clearly admit here today that even

20 as you sit here now you don't understand how the model

21 works?

22 A. I don't understand how the model works. But

23 if I run the math on what allowance values and allowance

24 costs -- the cost of a ton of coal allowance is

25 significantly higher than any of the adjustments made in

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1 the evaluation process.

2 Q. Well, thanks for that. But in the, again,

3 when I asked you in your deposition if you knew how SO2

4 was evaluated and whether or not you had double dipped,

5 you honestly told me that you frankly didn't know

6 whether you had double dipped or not, didn't you?

7 A. At that time I did not know.

8 Q. Okay. And you didn't know when you wrote your

9 testimony, did you?

10 A. I did not because I did not have all the

11 information I needed.

12 Q. And as you sit here today, I believe we just

13 heard you testify under oath that you still don't know.

14 A. I don't know how the Progress Energy

15 evaluation process handles sulfur, but I know that it

16 does not use the evaluation, I mean the allowance price

17 in that process.

18 Q. Now let's continue with other issues in your

19 testimony. You're also aware, aren't you, that

20 Mr. Weintraub has accused you of understating the cost

21 of coal in 2006 and 2007 because he says that there

22 would have been a price impact of taking a three-year

23 contract bid and cutting it down to just one year? Are

24 you aware of that?

25 A. I'm aware he said that, yes.

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1 Q. Okay. And you didn't disagree with me in your

2 deposition that optionality with respect to pricing,

3 when you can buy and how much you can buy has monetary

4 value in the coal market, did you?

5 A. It can have monetary value. Yes.

6 Q. And you even recognized, did you not, that

7 coal suppliers may hold a bid open for a few months but

8 they will not wait around forever for someone to make up

9 their mind because time is money to them; correct?

10 A. That is correct.

11 Q. And speaking of contracts, you're aware that

12 Mr. Weintraub has also accused you of failing to account

13 for damages that would have occurred due to

14 underutilization provisions in PEF's barge contract had

15 PEF bought the Indonesian coal that you suggest in 2007;

16 correct?

17 A. He speculated that that could create a penalty

18 from the barge contract. Yes.

19 Q. Okay. Well, let's talk about that, Mr.

20 Putman. You're certainly familiar with provisions in

21 coal barge transportation contracts that provide for

22 penalties if a utility does not use the barge to

23 transport a minimum amount of times, aren't you?

24 A. I agree that there are such provisions. I did

25 not find one in the MEMCO contract.

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1 Q. Well, let's see. You stated in your

2 deposition that you had a copy of the barge contract but

3 you had never even considered it or read it prior to you

4 filing your testimony; correct?

5 A. That is correct.

6 Q. So at the time you filed your testimony, you

7 didn't know one way or another; correct?

8 A. That is correct.

9 Q. And the reason that you didn't know one way or

10 the other is because you said it never occurred to you

11 that there may be such issues as impacts on contracts

12 that PEF had; correct?

13 A. Again, my process was to use the evaluation

14 numbers off of the spreadsheets produced by your

15 company, and so I did not evaluate it in more depth than

16 that.

17 Q. Well, let me ask you this. You just said that

18 you didn't find such a provision in the MEMCO barge

19 contract, but if this Commission has it and another

20 witness points it out and there is such a provision in

21 there even though you couldn't find it, you would agree

22 with me that if that provision exists, you need to

23 account for that and you need to address that in your

24 amended testimony; correct?

25 A. I would agree if you show it to me, then I

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1 will change my current testimony where I say it's not

2 there. I would change that. But whether or not it

3 would impact my evaluation, I don't really think it

4 would.

5 Q. Okay. So you -- if it's there, you'll agree

6 with me that it exists and we would have had to comply

7 with it, but you will not agree that that would have

8 caused damages and your number needs to go down?

9 A. Again, because I'm not convinced that under

10 all of the circumstances any penalty would have applied

11 if it did exist in the contract. So, I mean, you've got

12 a couple of things that would have to happen before a

13 penalty had to be applied, if one even exists in the

14 contract.

15 Q. Okay. I want to ask you some questions about

16 the 2006 coal that you allege PEF should have bought

17 from the two Kennecott bids that offered to supply PEF

18 coal from Kennecott's Spring Creek Mine in Montana. And

19 for ease of reference, I'm going to refer to that coal

20 as Spring Creek coal when I talk about it.

21 A. One company, one offer was pure Spring Creek

22 coal. The second offer was a blend of Spring Creek coal

23 and an Illinois Basin coal. So they are different.

24 Q. Fair enough. And just for ease of reference,

25 I'm going to refer to those as the Spring Creek coals.

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1 A. Okay.

2 Q. Now to be clear about this, when I asked you

3 at your deposition whether or not you knew what coal

4 mine that coal came from, you had no idea, did you?

5 A. That's correct.

6 Q. In fact, you really didn't even know what

7 state the coal in 2006, the Spring Creek coal would have

8 come from, did you?

9 A. I did not know where the Kennecott coal would

10 come from. That's correct.

11 Q. And at the time of your deposition you

12 couldn't name one utility in the United States that had

13 ever even burned Spring Creek coal, could you?

14 A. I assume that's what I said. So, yes, I would

15 agree with that.

16 Q. Well, I don't want you to assume. Let me go

17 ahead and read it for you. Page 30, Line 16. "So with

18 respect to the exact coal that you were using in your

19 analysis in 2006 from the two Kennecott bids, I just

20 want to make sure I understand, can you tell me any

21 utility at all in the United States that has ever burned

22 that coal?" Your answer, "I cannot." Did I read that

23 correctly?

24 A. You read it correctly. And I -- at that point

25 that is correct.

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1 Q. And you admit that in the last case, Docket

2 060658, you cannot point to one single place where this

3 Commission heard evidence on Spring Creek coal, can you?

4 A. I mean, that's correct.

5 Q. Thank you. You talk about Georgia Power's

6 Plant Scherer in your direct testimony, I believe, at

7 Page 4; correct?

8 A. Of my direct testimony. Okay. Okay. Yes.

9 Q. And Plant Scherer burns 100 percent Powder

10 River Basin coal, doesn't it?

11 A. That's correct.

12 Q. But you don't know if Plant Scherer has ever

13 burned Spring Creek coal, do you?

14 A. I cannot sit here today and say I know that

15 for a fact. No.

16 Q. Are you aware that there are, that there are

17 co-owners that own part of Plant Scherer other than

18 Georgia Power?

19 A. Yes. Yes.

20 Q. Are you aware that Florida Power & Light is a

21 co-owner of Plant Scherer?

22 A. Yes.

23 Q. And are you aware that in a public record that

24 Florida Power & Light filed with this Florida Public

25 Service Commission, FP&L stated that Plant Scherer

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1 rejected the use of Spring Creek coal because the sodium

2 content of that coal was too high?

3 A. I'm not aware of that.

4 MR. BURNETT: Sir, may I approach?

5 CHAIRMAN CARTER: You may proceed.

6 MR. BURNETT: Thank you, sir.

7 BY MR. BURNETT:

8 Q. Mr. Putman, I'd like to refer you to the

9 question there. "For each request for proposal for the

10 coal issued in 2008 by Georgia Power Company/Southern

11 Company Services on behalf of FP&L for its interest in

12 Scherer Unit 4, what action was taken? Include with

13 your response a summary of the evaluation process and

14 how successful the proposals were selected." I want to

15 go down -- can you read me the highlighted section

16 there?

17 A. It says, "The Spring Creek offer was not

18 considered because of the high sodium content of the

19 coal."

20 MR. BURNETT: Mr. Chair, may I mark this as an

21 exhibit?

22 CHAIRMAN CARTER: Okay. I think, I believe

23 55. Let me get my notes to be sure. Staff, can you

24 help me out? I think it's 55, isn't it?

25 MS. BENNETT: It is 55.

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1 CHAIRMAN CARTER: I think that will be 55.

2 And let me get my paper together here so we can give it

3 a short title.

4 Recommendation on a short title, Mr. Burnett?

5 MR. BURNETT: Yes, sir. It's staff's -- in

6 Docket 090001, staff's second set of interrogatories

7 number 24.

8 (Exhibit 55 marked for identification.)

9 CHAIRMAN CARTER: Okay. Let's try it again.

10 MR. BURNETT: Sorry.

11 MR. McWHIRTER: Can I ask who the sponsor of

12 this exhibit is so we can take them on voir dire with

13 respect to the truthfulness of the information contained

14 in the exhibit?

15 MR. BURNETT: Mr. Chair.

16 CHAIRMAN CARTER: Mr. Burnett.

17 MR. BURNETT: I'm not offering this for

18 truthfulness or otherwise. I simply have asked this --

19 first of all, I haven't moved it into evidence yet.

20 I've only asked this witness questions about it. I do

21 intend to move it in at the end though. And I could

22 care less whether the statement is true or not at this

23 point. I've asked the witness as to his credibility as

24 to whether he knew this, whether he's researched this.

25 This is what I'm offering this for.

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1 CHAIRMAN CARTER: Okay. He's using it for

2 cross-examination. You may proceed.

3 MR. BURNETT: Thank you, sir.

4 BY MR. BURNETT:

5 Q. Mr. Putman, at least at the time of your

6 deposition you didn't know one way or another whether

7 Spring Creek coal has high sodium or not, did you?

8 A. No. I did know that Spring Creek coal had

9 high sodium coal. I did not tie the Kennecott bid to

10 Spring Creek. I admit that.

11 Q. Okay. Now let's talk about the transportation

12 costs for Spring Creek coal. You admitted to me in your

13 deposition, didn't you, that the cost of transportation

14 to get that coal from Montana to Crystal River would be

15 higher than the actual cost to buy the coal itself,

16 didn't you?

17 A. Yes.

18 Q. And despite this admission though that

19 transportation cost is the highest element of the cost

20 of the coal that you say PEF should have bought in 2006,

21 you don't even know what elements make up the

22 transportation costs that you use in your own testimony,

23 do you?

24 A. I've relied on the information put together by

25 Progress Energy on their evaluation sheets in an effort

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1 to fully support their decision process and that is what

2 I used. I did not try to second-guess their evaluation,

3 I did not try to investigate whether their evaluation

4 was correct. I used their evaluation.

5 Q. I appreciate that, sir. But my question was

6 you don't know what elements make up those

7 transportation costs, do you?

8 A. I did not know that at the time of the

9 deposition.

10 Q. And you did not know that at the time then

11 obviously when you filed your direct testimony, did you?

12 A. That's correct.

13 Q. And do you know them as you sit here today?

14 A. Yes. I've looked since then.

15 Q. Wouldn't that have been a good idea to take a

16 look at before you filed testimony?

17 A. Not in the way I approached this analysis,

18 which was to rely on Progress Energy's numbers that they

19 put together and that they were using for their decision

20 process at the time the decision was made.

21 Q. Now I want to try to wrap up my discussion on

22 Spring Creek coal. You want to -- I want to briefly

23 talk to you about capital upgrades.

24 You agreed with me in your deposition that if

25 Crystal River 4 and 5 needed capital upgrades above and

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1 beyond the upgrades that this Commission considered in

2 the last case, the cost of those upgrades should be

3 considered in the Commission's cost-effectiveness test,

4 didn't you?

5 A. And that -- using the word if, yes, that was a

6 correct statement.

7 Q. Yet despite this agreement you didn't perform

8 any analysis to determine whether PEF would need any

9 additional new and incremental capital upgrades to burn

10 the Spring Creek coal that you sponsored, did you?

11 A. I did not because I relied on Progress

12 Energy's evaluation process to produce the numbers that

13 they would use in their decision making at the point

14 they made a decision.

15 Q. And, sir, you similarly did not perform any

16 analysis on how the Spring Creek coal that you sponsor

17 may impact new environmental equipment being installed

18 at Crystal River like scrubbers, did you?

19 A. I did not.

20 Q. And you acknowledged in your deposition that

21 when plants have scrubbers and burn bituminous coals

22 like the one you suggest we should have bought,

23 utilities like Southern Company with Plant Miller, you

24 may have to consider adding very expensive capital

25 additions like baghouses to deal with mercury discharge,

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1 didn't you?

2 A. I guess I think you need to ask that question

3 differently because you said bituminous and I think you

4 may have meant sub-bituminous.

5 Q. I certainly did mean sub-bituminous. Thank

6 you.

7 A. In terms of sub-bituminous, yes, I would agree

8 that there may be needs for additional equipment. Yes.

9 Q. And one of those needs may --

10 A. May.

11 Q. I'm sorry.

12 A. I'm sorry, but may is the word I underlined.

13 Q. Well, and one of those pieces of equipment as

14 you admitted in your deposition may be a baghouse;

15 correct?

16 A. That's correct.

17 Q. And you admitted to me that those can be very

18 expensive, didn't you?

19 A. That's correct.

20 Q. Now turning to Indonesian coal, do you, do you

21 dispute the fact that sometimes a coal supplier may

22 place a bid to one party and then find a better deal

23 somewhere else and make a sell to that better deal?

24 A. That does happen. Yes.

25 Q. And I think you admitted in your deposition

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1 that the United States is only what you call, quote, an

2 occasional purchaser of Indonesian coal and that the

3 Asian market is booming. It's a better place for

4 Indonesia to sell their coal and only occasionally is

5 there a competitive advantage to bringing it to the

6 United States. You said that; correct?

7 A. I said that. And I said that yesterday, too.

8 Q. Now yesterday you theorized that the

9 Indonesian coal suppliers may have sold the coal that

10 they had bid to Progress Energy to Southern Company

11 instead of sticking with their bid; correct?

12 A. I saw that as a combination of circumstances

13 that indicated that was a possibility.

14 Q. Well, assuming your hypothetical is right, how

15 much do you think that Southern Company paid for that

16 coal?

17 A. They paid, I know the coal that was bought

18 from Indonesia that arrived at Scherer was expensive.

19 Q. I'm sorry. Did you say you knew it was

20 expensive?

21 A. Yes.

22 Q. Do you know how expensive it was?

23 A. I saw that, but I don't directly remember the

24 number.

25 MR. BURNETT: Sir, may I approach?

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1 CHAIRMAN CARTER: You may approach.

2 Mr. Burnett, are you going to need a number

3 for this or are you just using it for cross-examination?

4 Do you want a number for identification purposes?

5 MR. BURNETT: Yes, sir, if I may.

6 CHAIRMAN CARTER: This will be, Commissioners,

7 Number 56. A short title recommendation, Mr. Burnett.

8 Short.

9 MR. BURNETT: Indonesian Coal Price.

10 CHAIRMAN CARTER: Great. You may proceed.

11 (Exhibit 56 marked for identification.)

12 MR. BURNETT: Thank you, sir.

13 BY MR. BURNETT:

14 Q. Mr. Putman, I'd like to draw your attention to

15 what's now been marked for identification as Exhibit 56.

16 Do you see the cost in cents per MMBtu that I have

17 highlighted there?

18 A. I do.

19 Q. Do those numbers look like the ones you recall

20 seeing?

21 A. Yes.

22 Q. So you'd have no reason to disagree with me

23 that those numbers are accurate?

24 A. I have no reason to disagree.

25 Q. Thank you. By the way, let me ask you one

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1 more question on that. These are in cents per MMBtus.

2 Let's take the first one. What does 470 cents per MMBtu

3 convert into for dollars per Btu?

4 A. $4.70.

5 Q. Thank you. Also, you can't point me to

6 anywhere in the record in Docket 060658 where this

7 Commission heard evidence on Indonesian coal, can you?

8 A. About Indonesian coal or a lot of other coals,

9 that's correct.

10 Q. And with respect to the transportation costs

11 for Indonesian coal, just like with Spring Creek coal at

12 least at the time of your deposition and the time you

13 filed testimony, you didn't know what elements make up

14 the transportation costs that you used in your own

15 testimony, did you?

16 A. I relied on the information produced and put

17 together by Progress Energy on their evaluation sheets

18 and counted on them to have done a good job of doing

19 that.

20 Q. Well, just like the Spring Creek coal, you

21 admit, don't you, that the transportation costs to get

22 Indonesian coal to the United States will be more

23 expensive than the cost to buy the coal itself; correct?

24 A. I certainly would expect that, yes.

25 Q. And just like Spring Creek coal, you didn't

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1 perform any analysis to see if there were any

2 transportation constraints for the delivery of

3 Indonesian coal in 2007, did you?

4 A. I viewed Progress Energy as being in the best

5 position to determine what costs were involved and that

6 they needed to include in their decision-making process

7 and that those numbers would show up on the evaluation

8 sheet. I relied on that.

9 Q. Well, if that reliance was misplaced and there

10 were other steps to the process, you would agree with me

11 that that would be important to consider those other

12 steps, wouldn't you?

13 A. I guess that's a hypothetical set of

14 combinations, and I'm not comfortable with agreeing with

15 that. No. I mean, that's sort of open-ended, and I

16 can't agree with that being so open-ended.

17 Q. Okay. Well, let's, let's ask about some

18 specifics. When I asked you several questions about

19 offloading seagoing barges at the International Marine

20 Terminal such as the unloading rates, you didn't have

21 any idea about that topic, did you?

22 A. I had seen the bid and so knew the numbers

23 that were proposed by the bid. I did not know the

24 impacts of that on IMT or other unloading facility, how

25 that would impact that. No.

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1 Q. Well, and let me be specific. You didn't know

2 whether at IMT gearless import vessels must be

3 discharged from the import vessel to a river barge and

4 then from the barge to the ground before they could be

5 blended. You didn't know about that, did you?

6 A. I did not know that and did not view that as

7 my responsibility. I view that as Progress Energy's

8 responsibility.

9 Q. Okay. And you didn't know that same question

10 for the United Bulk Terminal, did you?

11 A. Same answer.

12 Q. And, again, you didn't know what the

13 trans-loading contract rate for gearless Panamax vessels

14 at IMT was, did you?

15 A. I did not. Same answer.

16 Q. And you weren't aware of an incident in

17 October 2006 where a Panamax sea vessel struck the dock

18 at IMT, did you?

19 A. No, I'm not familiar with that.

20 Q. And you weren't even specifically aware of

21 what kind of vessels would be used to transport

22 Indonesian coal, were you?

23 A. One of them talked about being a gearless

24 vessel.

25 Q. But you weren't specifically aware at the time

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1 of your deposition, were you?

2 A. I was aware that one of the bids, and I think

3 it was PT Adaro, was offering it in gearless vessels.

4 Q. Well, just like Spring Creek coal, let me turn

5 to this, you agreed with me that if PEF needs capital

6 additions to burn Indonesian coal that were not

7 considered by the PSC in the last case, those additions

8 should, just like Spring Creek coal, be considered in

9 the cost-effectiveness test for Indonesian coal;

10 correct?

11 MR. McGLOTHLIN: I'm sorry.

12 THE WITNESS: I'm sure you left the word "if"

13 off of your question.

14 MR. McGLOTHLIN: I wanted the same

15 clarification. I didn't hear that posed as an if

16 question.

17 BY MR. BURNETT:

18 Q. It's an if question.

19 A. As an if question, then, yes, I would have

20 agreed with that.

21 Q. Now you would agree with me that Indonesian

22 coal has an extremely low sulfur content; right?

23 A. Yes.

24 Q. And you also agree with me that some

25 precipitators on coal units may need sulfur injection

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1 systems to deal with coals that have low coal sulfur

2 content.

3 A. Some precipitators might need that, yes.

4 Q. Well, despite the fact that we agree that

5 these coals that you're affording have low sulfur and

6 despite the fact that we agree that some ESPs or

7 precipitators may need sulfur injection systems, you

8 didn't perform any analysis to determine whether PEF

9 would need such upgrades to burn Indonesian coal, did

10 you?

11 A. I was aware based on the testimony in a

12 prior case that the precipitator installed on Crystal

13 River 4 and 5 was significantly oversized in order to

14 allow very low sulfur coal to be used in that plant

15 without upgrades.

16 Q. Well, thank you, sir. But my question to you

17 was with respect to the 2007 Indonesian coal that you

18 used in your analysis, you didn't perform any analysis

19 to determine whether Progress Energy Florida would need

20 any new incremental capital additions that were not

21 considered in the last docket to burn that coal, did

22 you?

23 A. I did not do an independent analysis.

24 Q. Thank you. You also didn't research what

25 PEF's opacity limitations are at Crystal River 4 and 5,

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1 did you?

2 A. I did not.

3 Q. You also didn't research what PEF's

4 particulate matter discharge limitations are at CR4

5 and 5, did you?

6 A. I did not.

7 Q. Now I want to turn to the topic of test burns,

8 sir. You agreed with me both in the last case and in

9 your deposition in this case that before a company

10 switches to a new coal, it should do test burns,

11 evaluate operational issues, recheck economics and maybe

12 even do a second test burn; correct?

13 A. I would agree with that.

14 Q. And you also agree with me that the only way

15 to know what a unit will actually do with coal is to

16 make a real effort to test the coal to the unit's

17 maximum capability, don't you?

18 A. I would agree with that.

19 Q. And you also agree me that bench marking off

20 the experience that other utilities have with coal is an

21 important part of the testing process; correct?

22 A. I would agree with that.

23 Q. And at Pages 127 to 130 of your deposition I

24 think you give the most comprehensive description of

25 spontaneous combustion that I've ever heard. So you

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1 would agree with me that you have to be careful with

2 spontaneous combustion when dealing with sub-bituminous

3 coals; correct?

4 A. I would agree with that.

5 Q. Now in your last deposition -- in your

6 deposition I showed you an article about the Scherer

7 plant and testing Indonesian coal. Do you remember

8 that?

9 A. I remember the article. I'm not sure -- I

10 guess I did see it at the deposition. I think I had

11 seen it before that.

12 Q. Okay. It looks like this. It's in your blue

13 packet.

14 A. Right.

15 Q. And you remember when I asked you the question

16 here, when this article says that I understand that

17 Georgia Power has already made a deal with Adaro to test

18 Indonesian coal at the Scherer Plant during the first

19 half of 2006, so imported coal may be in Scherer's

20 future, you told me that you didn't know one way or

21 another whether Scherer had performed such test;

22 correct?

23 MR. McWHIRTER: Mr. Chairman, can I request

24 that this last exhibit and the one he's holding up now

25 be given a number for identification in case we want to

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1 refer to it some other time?

2 MR. BURNETT: I have no problem with that,

3 sir. It is in evidence as Exhibit 2 now as part of the

4 deposition. So it's already in as part of the

5 composite.

6 MR. McWHIRTER: Well, give us a reference, if

7 you would.

8 MR. BURNETT: It is in evidence as Exhibit 2

9 as a deposition exhibit.

10 MR. McWHIRTER: To whose deposition?

11 MR. BURNETT: Mr. Putman's.

12 MR. McWHIRTER: How about this document with

13 the price that Georgia Power paid for --

14 MS. HELTON: I think that's already been given

15 Exhibit Number 56.

16 CHAIRMAN CARTER: It is 56.

17 MS. HELTON: And with respect to this exhibit,

18 I think it would be helpful to still have a more

19 specific reference so that if someone does want to refer

20 to it. Exhibit 2 is a pretty exhaustive exhibit, I

21 believe.

22 MR. BURNETT: Yes, ma'am. We could look that

23 up. It is -- I'll have Ms. Tibbits (phonetic) look that

24 up. It's Exhibit 1 to Mr. Putman's deposition.

25 CHAIRMAN CARTER: Ms. Helton, you're

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1 recommending that we give it a separate number for

2 identification purposes, or what are you saying?

3 MS. HELTON: No, sir. It was just -- I think

4 that this had a separate deposition, deposition exhibit

5 number, which Mr. Burnett just said was Number 1, and I

6 think that would be more helpful to Mr. McWhirter and

7 others who may want to refer to this in their briefs.

8 CHAIRMAN CARTER: Okay. Are you okay with

9 that, Mr. McWhirter?

10 MR. McWHIRTER: Thank you. Yes, sir. And

11 this is going to be 56 for identification?

12 CHAIRMAN CARTER: 56. Yes, sir. 56. That is

13 correct.

14 You may proceed.

15 MR. BURNETT: Thank you.

16 BY MR. BURNETT:

17 Q. So, Mr. Putman, again we established that

18 Plant Scherer was a one -- is already burning

19 100 percent sub-bituminous coal; correct?

20 A. That's correct.

21 Q. Yet prior to filing your testimony in this

22 case you didn't do anything to confirm whether or

23 not that plant that's already burning 100 percent

24 sub-bituminous coal felt it necessary to test Indonesian

25 coal for the first half of 2006 anyhow, did you?

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1 A. I think the answer to that is yes, but I, it

2 was a little confusing, the question. But, no, I did

3 not check prior to my testimony whether or not Scherer

4 was testing Indonesian coal.

5 Q. Thank you.

6 A. I would like to make one comment about this.

7 When I saw it in my deposition, it had a date, a

8 publication date. The article was part of a whole page.

9 Q. Okay. It --

10 A. I just think it might be appropriate if this

11 was a date, if there was a date on it that it was

12 published.

13 MR. BURNETT: Mr. Chair.

14 THE WITNESS: Is that fair?

15 MR. BURNETT: The date -- the full article

16 appears again as Exhibit 1 in his deposition.

17 CHAIRMAN CARTER: Okay. Just refer to the

18 exhibit number. Let's proceed.

19 MR. BURNETT: Okay. Thank you, sir.

20 MR. McGLOTHLIN: Can we have that date for his

21 purpose if the witness --

22 CHAIRMAN CARTER: Just look at the deposition.

23 You don't have the deposition?

24 MR. McGLOTHLIN: I have the deposition.

25 CHAIRMAN CARTER: And exhibit number?

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1 MR. McGLOTHLIN: I don't think I have the

2 exhibit.

3 CHAIRMAN CARTER: The complete article is in

4 there; is that correct?

5 MR. BURNETT: Yes, sir.

6 May I proceed, sir?

7 CHAIRMAN CARTER: You may proceed.

8 MR. BURNETT: Thank you.

9 BY MR. BURNETT:

10 Q. Now, Mr. Putman, in your direct testimony you

11 come to the conclusion that if PEF needed to test burn

12 Spring Creek or Indonesian coal at all, it would only

13 take about four days to conduct a stack test; correct?

14 A. Correct.

15 Q. And just like I asked you in your deposition,

16 sir, if PEF believes you and we start burning one of

17 these coals without a test or maybe just with a four-day

18 test, you will not have to answer to the Florida Public

19 Service Commission if something goes wrong at the plant

20 like an outage or a derate, will you?

21 A. I would not expect to have to answer to them.

22 No.

23 Q. And you're not willing to post any sort of

24 bond or any kind of insurance for PEF to use to buy

25 replacement power if we believe your testimony and

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1 something happens and there's a derate or an outage, are

2 you?

3 A. I would not expect to post bond.

4 Q. Well, last few questions and I think I'm done,

5 sir. You talked a lot yesterday about the operational

6 capabilities of Crystal River 4 and 5, did you not?

7 A. I did.

8 Q. With respect to both the 2006 and 2007 coals

9 that you assert we should have bought in this case, you

10 have not performed an analysis as to how either one of

11 those coals would affect pulverizer capacity, have you?

12 A. I would say I did an analysis. I read the

13 material about the design of the boilers again and

14 satisfied myself that -- I mean, I knew what the design

15 was. If that's an analysis, I did an analysis.

16 Q. Well, sir, let's go back to Page 33 of your

17 deposition, Line 16, when I asked you with respect to

18 the 2006 and 2007 coals, "Have you performed any

19 analysis with regard to how either of these coals would

20 affect pulverizer capacity at CR4 and 5?" Your answer,

21 "I have not." Did I read that correctly?

22 A. Yes.

23 Q. And you similarly have not studied how their

24 moisture levels may impact operational performance, have

25 you?

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1 A. Again, it's a question of timing. You -- I

2 have done that. I may not have done it at the time I

3 did the deposition. The way you phrased the question

4 just then, yes, I have done an analysis. I may not have

5 done it at the time that the deposition occurred.

6 Q. So, sir, is it your testimony that with

7 respect to these 2006 and 2007 poles, after you filed

8 testimony and after your deposition you have now done an

9 analysis on pulverizer capacities and moisture impacts?

10 A. That's correct.

11 Q. And where could I see that, sir?

12 A. The analysis -- again, I preface this, it all

13 defends on how you define analysis. I read the

14 material, I formed a judgment in my brain, and that's

15 where it is. That is my analysis.

16 Q. And I'm going to go out on a limb and suggest

17 that you can't print copy of your brain that I could

18 review and cross you on?

19 A. I wouldn't want you to see what's in my brain.

20 Q. Fair enough. Well, let me try to go through

21 these quickly, and perhaps you could just tell me yes or

22 no if you have performed an independent analysis on

23 these. Have you performed an analysis for self-heating

24 temperatures of these two coals as they may impact the

25 plants?

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1 A. At this point, yes, I have done an analysis.

2 It is admittedly a very minor analysis, but I have done

3 an analysis.

4 Q. The same question on boiler efficiency.

5 A. The same answer.

6 Q. The same question on heat rates.

7 A. The same answer.

8 Q. The same question on ash levels.

9 A. The same answer.

10 Q. The same question on base-to-acid ratios.

11 A. Same answer.

12 Q. Same question to sodium levels.

13 A. Same answer.

14 Q. Same question to calcium levels.

15 A. Same answer.

16 Q. Same question to sulfur levels.

17 A. Same answer.

18 Q. Same question to electrostatic precipitator

19 impacts.

20 A. Same answer.

21 MR. BURNETT: I have nothing further, sir.

22 CHAIRMAN CARTER: Thank you. Commissioner

23 Argenziano.

24 COMMISSIONER ARGENZIANO: I will just wait

25 until after the questions.

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1 CHAIRMAN CARTER: Okay. Commissioner Skop.

2 We did staff yesterday, so we are going to

3 come to the bench and then we will go back to redirect.

4 Commissioner Skop.

5 COMMISSIONER SKOP: Thank you, Mr. Chairman.

6 Just one quick question to Mr. Putman following up on a

7 cross-examination question by Mr. Burnett. I guess he

8 had given a scenario of reality versus a hypothetical,

9 and I think that you spoke to that. I'm trying to

10 better understand and appreciate your testimony to the

11 extent that I know that the Commission has already

12 previously established the fact that CR4 and 5 units

13 were built with the inherent capability to burn a blend

14 of PRB coal, that the capability was lost through

15 failure to maintain the permits, and that the Commission

16 basically has required that the 80/20 blend be used when

17 it's cost-effective to do so.

18 If I understand your testimony correctly, and

19 please correct me if I'm wrong, the hypothetical example

20 that you are asking the Commission to adopt assumes that

21 no matter what, no matter what other circumstances are

22 involved, that Progress should currently be burning that

23 80/20 blend of CAPP coal and PRB. Now, in contrast,

24 Progress via interrogatory response to 29A has asserted

25 that they have come up with another alternative which

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1 burns a blend of bituminous coal which they allege is

2 more cost-effective than the hypothetical you have

3 posited for the Commission to consider. So if I have

4 that wrong, please correct me. But, if I don't, then I

5 have a follow-up question for you.

6 THE WITNESS: I guess it's all what you mean

7 by hypothetical. I evaluated the decision that was made

8 at the time of the 2004 decision-making when they bought

9 coal and should have, according to the Commission's

10 evaluation of the last case, they should have at that

11 point had a unit that had a permit, had a unit that had

12 tested Power River Basin coal, had a unit that had all

13 the modifications necessarily made, and they should have

14 been in a position in April of 2004 to buy the lowest

15 cost coal offered to them. They did not have that

16 capability. They were continuing to be imprudent in the

17 terms that you all have used, and, therefore, they

18 couldn't buy that coal.

19 So assuming that that imprudency would

20 continue to exist, then the question is what is the

21 refund that's fair. But things that happened after that

22 that they took action to do which they could do under

23 their existing permits at the time, which includes

24 buying other bituminous coal, blending those other

25 bituminous coals, maybe you can argue that was

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1 mitigating the risk in some way. But the decision made

2 in May/April of 2004 was, in my view, not a prudent

3 decision.

4 COMMISSIONER SKOP: Okay. And fair enough. I

5 mean, I think that listening to what you just said there

6 is three basic building blocks. There was the past

7 case, which the Commission has already adjudicated;

8 there's the current case, which basically your testimony

9 centers on what they should have done in 2004; and then

10 there is the forward-going basis on do they have that

11 inherent capability.

12 Now, the question I have for you is if we

13 follow your analysis in 2004, and they should have,

14 according to you, purchased the PRB coal, then I guess

15 for 2007 they should have purchased the Indonesian coal,

16 but what they ended up doing, to Mr. Burnett's point, in

17 reality was something completely different that resulted

18 in a more cost-effective alternative. So if you have

19 two different paths -- I understand the imprudency, and,

20 again, I think I made it really clear in my last

21 concurring opinion that I expect them to have and

22 restore that inherent capability to burn 80/20 when it

23 is cost-effective to do so.

24 But the point I'm faced with today is do I

25 stick rigidly to your hypothetical and ignore a more

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1 cost-effective innovative alternative, or do I try to

2 evaluate your alternative versus what Progress has

3 offered that they have done in the instant case at a

4 more cost-effective basis.

5 And so I guess the question I would have to

6 you is assuming your testimony versus what Progress

7 alleged they actually did, if we accept your position,

8 then what are the damages to the extent that Progress

9 has already done it cheaper than the testimony you've

10 offered?

11 THE WITNESS: My response to that is, again,

12 it is not an either/or situation. They could have

13 bought low quality Btu bituminous coal and blended it.

14 They could have also, if they had the right permits,

15 bought sub-bituminous coal and blended it. They could

16 have captured both savings. That's point number one.

17 The second point is the comparison that is

18 made by Progress Energy in this case so far is a

19 comparison of the fact that their blend of bituminous

20 and bituminous was cheaper than a blend of

21 sub-bituminous and bituminous when the process that was

22 described in the last case is to compare back to the

23 most expensive coal that was actually bought and

24 received. So it was not a comparison between two

25 options, new options. It was to compare an option back

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1 to what was already bought and received moving through

2 the transfers (phonetic). That is the way the analysis

3 was described and set up. So comparing the two options

4 to each other is instructive, but it is not the way the

5 Commission said we should analyze their decisions.

6 COMMISSIONER SKOP: Okay. Fair enough. I

7 just have, I believe, one final question. You spoke to

8 that they should have captured both savings. But if one

9 option that they actually did in reality versus what

10 they should have done, according to you, if one option

11 were cheaper than the other, then why wouldn't you just

12 go with the -- you know, not that it's right, but why

13 wouldn't you just accept the option that provided the

14 most overall cost savings for the consumer?

15 THE WITNESS: Because if you can make two

16 savings, you ought to make two savings.

17 COMMISSIONER SKOP: But if burning a blend of

18 bituminous coal at the end of the day is cheaper than

19 burning a blend of 80/20, the 80/20 would yield no

20 savings. So I'm trying to understand how you would get

21 both savings there.

22 THE WITNESS: I'm going back to what was

23 bought and delivered. They could have replaced some of

24 that bought and delivered with their blend, I mean,

25 bituminous/bituminous, and they could have replaced some

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1 of that bought and delivered with sub-bituminous and

2 bituminous. The ratepayers would have gained -- based

3 on their numbers and your position, they would have made

4 more on the bituminous and bituminous, but they would

5 have also made savings on the sub-bituminous and

6 bituminous. And in defending the ratepayers, they

7 should have captured both of them.

8 COMMISSIONER SKOP: Okay. I guess maybe I'm

9 missing something there, because I understand exactly

10 what you're saying, I was very supportive in the last

11 case, but I'm not seeing those savings. So I guess the

12 question that would arise -- because I'm looking at the

13 data that has been presented by OPC, and I'm also

14 looking at the data on 29A. And I guess what that is

15 telling me is that although they may have been imprudent

16 in 2004, they actually covered at a lower overall cost

17 to the consumer.

18 So I guess what I'm struggling with, if that

19 is the case, then could the Commission find that maybe

20 their actions dating back as far as 2004 were, indeed,

21 imprudent, but award zero damages because they covered

22 with a savings to consumers?

23 THE WITNESS: I think that is a decision for

24 the Commission to make. It sounds an awful lot like

25 hindsight review. It says a decision was made which you

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1 all have defined as an imprudent decision in 2004

2 because they didn't have the permit. And then you are

3 going to now say, okay, we are going to second-guess

4 that decision on things that happened after that. That,

5 as ex-utility person, makes me nervous as hindsight

6 review.

7 COMMISSIONER SKOP: Well, speaking to that, I

8 mean, I guess I was accused of that last time, because I

9 basically, you know, suggested in my concurring opinion

10 that they had lost the capability that was inherent to

11 the units themselves and that that had been recovered --

12 as you have stated in both of your testimonies in both

13 dockets that that inherent capability has been paid for

14 by the ratepayers. So I was all for you need to restore

15 the inherent capability. But what I'm hearing now from

16 Progress is that there is a cheaper alternative to an

17 80/20 blend, and that cheaper alternative is at the

18 current time and the time at question is burning a blend

19 of bituminous coal from domestic and international. And

20 if that's the case, then why wouldn't we go with the

21 cheaper alternative?

22 THE WITNESS: Then that brings back the fact

23 that I don't really support their answer to 29A,

24 whatever it is. They come up with a cost of the blend

25 of sub-bituminous and bituminous which is totally out of

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1 line with the number they show on their evaluation

2 sheet.

3 COMMISSIONER SKOP: Okay, fine. But let me

4 ask you that, and I'm not concerned about their

5 evaluation sheet. I'm looking at the numbers in 29A in

6 comparison to the evidence offered by OPC in DJP-6,

7 which shows the evaluated cost of the coal, and also,

8 too, in large quantity, I think there has been a data

9 point that suggests that the delivered cost was about

10 $2.28 in dollars per MMBtu, or 2.26, subject to check,

11 and that price in all but, perhaps, one instance is

12 higher than the data that Progress showed in 29A.

13 THE WITNESS: Right. I apologize, I don't

14 have the 29A in front of me.

15 COMMISSIONER SKOP: Okay. I'm happy to -- you

16 can have my copy.

17 THE WITNESS: I'm sorry, could you --

18 COMMISSIONER SKOP: Yes, sir. If you were to

19 look at the column just to the right of coal supplier,

20 it says dollar per MMBtu delivered to the terminal, and

21 it shows, I guess, allegedly what Progress has done in

22 lieu of the 80/20 that you have suggested. And I guess

23 in 29A, in the response to that staff interrogatory,

24 they are alleging that, one, it's cheaper than the

25 equivalent price of PRB delivered to the terminal, but

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1 then I'm also relating those prices back to some of the

2 data that has been provided in the record evidence that

3 suggests that in all but one instance these prices are

4 at or below what PRB could be procured for.

5 So I guess I'm struggling to be fair, and I

6 fully support your position to the extent that, you

7 know, the Commission has previously established you burn

8 80/20 when it is cost-effective to do so. But beyond

9 that, if there is a more cost-effective option that

10 Progress maybe has stumbled into, and it results in more

11 savings to the consumers than burning the 80/20 blend,

12 then how could that be deemed -- I mean, I guess how

13 could damages arise from that? I mean, I could see that

14 you might go back to 2004 and say their actions were

15 imprudent, but there were no resulting damages as a

16 result of the imprudency.

17 THE WITNESS: Progress Energy testified to

18 this sheet. But when I compare the bids that were

19 available in 2004, May 2004 as evaluated, and this is on

20 TJP Exhibit 6, Page 1 of 1, which covers the bids

21 received for the May 2004 solicitation.

22 COMMISSIONER SKOP: I'm with you.

23 THE WITNESS: On the far right they show a

24 utilized cost delivered to the plant, which means that

25 it not only includes transportation all the way to the

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1 plant and not just to the terminal, but it also includes

2 the cost of utilization. Those numbers that are

3 available are in the $2 range.

4 We offered the two Kennecott bids, which are

5 under $2, and to me that is the comparison that ought to

6 be made, not to these other numbers which I don't

7 support and I don't really know where they came from of

8 $2.34, $2.33, those kind of numbers.

9 So I think it comes to a question of which set

10 of numbers do you believe. Progress Energy produced

11 both of those numbers. They produced the ones on my

12 exhibit and they produced these other numbers. One of

13 them clearly comes from the 2004 time period. I'm not

14 sure where the time period is. We have all heard

15 testimony about a market surge of Powder River Basin

16 coal. So coal bought after May 2004 probably would have

17 been more expensive, which I think leads to the question

18 of whether or not they made a mistake in 2004 in not

19 buying the coal. So, I mean, I hear what you're saying

20 and I understand what you are going to. I think the

21 question is was it really cheaper to buy the bituminous

22 and bituminous blend compared to what they could have

23 done in 2004 to create a low-cost sub-bituminous and

24 bituminous blend.

25 COMMISSIONER SKOP: Okay. Just one more on

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1 that final point, one more question. Assuming for the

2 sake of discussion that for the statement you just made

3 that it was cheaper for the bituminous/bituminous blend.

4 Would that not be prudent to have, I guess -- let me

5 rephrase my question. Assume it was cheaper for the

6 bituminous/bituminous blend, and that resulted in the

7 least-cost option. Would there be any damages even if

8 they were imprudent as far back as 2004?

9 MR. McGLOTHLIN: Excuse me, Commissioner, I

10 think you may have misspoken.

11 COMMISSIONER SKOP: Okay.

12 MR. McGLOTHLIN: I think you meant to say

13 sub-bituminous/bituminous blend for the purposes of the

14 question, if I'm following you.

15 COMMISSIONER SKOP: No, I think the reality --

16 this all goes back to the reality versus the

17 hypothetical. Mr. Putman is looking at 2004 and

18 basically drawing conclusions as to what, in his

19 professional opinion, Progress should have done with the

20 facts known to them at that time.

21 Now, what I think Progress has alleged -- and,

22 Mr. Burnett, please correct me if I'm wrong -- is that

23 they may not have done that, but they did something else

24 in the alternative. And the alternative was a

25 bituminous/bituminous blend of domestic and

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1 international coal, which resulted in a lower cost to

2 the consumers than the 2004 not exercising or going down

3 that path would have offered.

4 So if that, indeed, is the case, then I guess

5 my question to Mr. Putman would be, yes, they may have

6 been imprudent dating back to 2004, but if their

7 subsequent actions cured that imprudency and resulted in

8 savings to the consumers, then the crux to me is what

9 are the damages and would they be, in fact, zero?

10 CHAIRMAN CARTER: Just a moment.

11 Commissioner Argenziano.

12 COMMISSIONER ARGENZIANO: Actually a question

13 to Commissioner Skop. I think -- and this is just what

14 I'm hearing. I'm taking a position at this time. But

15 what I think I'm hearing Mr. Putnam say is that his

16 opinion, with the facts that he used, and facts are not

17 hypothetical, there is a hypothetical component in

18 there, but the facts that he used at the time in 2004, I

19 think what he is saying, and correct me if I'm not

20 hearing this right, because I'm trying to figure out the

21 argument or the debate, is that he doesn't feel -- and

22 please correct me, Mr. Putnam. I don't want to put

23 words in your mouth. I'm trying to get this. You are

24 saying that the numbers that Progress used, you don't

25 know where they came from, or they are not the numbers

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1 that you used from their evaluation sheet or the facts

2 that were presented in the bids in 2004.

3 THE WITNESS: That's correct.

4 COMMISSIONER ARGENZIANO: So then how do we

5 know? You, Commissioner Skop, need to tell me, because

6 you are saying that Progress and Progress is saying that

7 they realized the savings subsequently. I'm not sure I

8 see that savings. I don't know where those numbers came

9 from, and I'm trying to figure out where the savings

10 came in.

11 MR. BURNETT: Mr. Chair.

12 COMMISSIONER SKOP: I will yield to Mr.

13 Burnett.

14 CHAIRMAN CARTER: Let's hear from Mr. Burnett.

15 You want to hear from Commissioner Skop and then --

16 COMMISSIONER ARGENZIANO: I am sitting here

17 trying to figure out where the savings -- was it cheaper

18 or was it not. That to me is the big question.

19 CHAIRMAN CARTER: Commissioner Skop.

20 COMMISSIONER SKOP: Thank you, Mr. Chairman.

21 And I think your point is well taken. I want to refrain

22 from debating the merits of this, but with respect to

23 the testimony, the last docket to me was clear cut and

24 the Commission did what it did and I took my own

25 separate opinion. This one, again, I think it boils

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1 down to whose numbers do you believe. And if Mr. Putman

2 is, in fact, correct as you suggested and Progress

3 should have done something in 2004, then, fine. But if

4 they have done something effectively in reality

5 different and that resulted in savings over and beyond

6 what Mr. Putman has alleged they should have done, then

7 perhaps you could find imprudency, but I don't see any

8 damages, and that's what I'm trying to struggle with.

9 COMMISSIONER ARGENZIANO: Mr. Chair.

10 CHAIRMAN CARTER: You're recognized.

11 COMMISSIONER ARGENZIANO: My question to Mr.

12 Putman is do you see the savings? I'm trying to find if

13 there is a savings. Can you tell me do you see

14 subsequent savings as Commissioner Skop has indicated,

15 and could you pinpoint those. And then I will ask

16 Progress the same question, because I really want to

17 know.

18 Did it ultimately lead -- whatever their

19 actions were ultimately subsequently, did it lead to

20 cheaper than what they could have got if they went --

21 and I know that is hindsight again. How do you know

22 that was going to come about, I guess.

23 THE WITNESS: If I can let me try and give my

24 opinion. I am sort of getting into things that are

25 truly Commission decisions, but you have asked my

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1 opinion.

2 First of all, I don't see savings compared to

3 a decision made in 2004. As time went on and they were

4 buying coal for a bituminous-to-bituminous blend and

5 comparing that to what they could have been doing at

6 that same time period, which was later than 2004, that

7 was cheaper than they could have gone out in 2005 and

8 2006 and bought a sub-bituminous/bituminous blend. That

9 is a possibility, because the sub-bituminous went up.

10 So, over time, if you were comparing them at the same

11 point in time, it is possible that there could have been

12 savings of using a bituminous/bituminous versus a

13 sub-bituminous/bituminous bought at that future point.

14 But, the other point is, and I think this is

15 where I'm probably out of my line, but it appears to me

16 that what is being introduced is the whole concept of

17 mitigation of imprudency, which I'm not sure I have ever

18 read anything about in my time in the utilities where an

19 imprudent act occurred at one point and then it was

20 mitigated. That's a slippery slope, because then it

21 introduces the question of should you have mitigated and

22 failed to mitigate and, therefore, we are going to

23 punish you. It's all hindsight review, and as an

24 ex-utility person, that makes me very nervous.

25 COMMISSIONER ARGENZIANO: Thank you.

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1 And, Mr. Chair, that was my point to

2 Commissioner Skop. If you are talking about it being

3 hindsight, I'm not sure -- it could have had a different

4 scenario, so I'm not sure that is the best practice to

5 take. We are going to doing this today because two

6 years from now something else could happen. It could

7 have turned out the other way. So I'm not sure I

8 understand your point.

9 COMMISSIONER SKOP: Well, I think, and with

10 all due respect, and I think your point is well taken,

11 too, and I think Mr. Putman has raised an issue that,

12 again, he's judging what Progress should have done based

13 on 2004.

14 Now, what Progress did in reality may have

15 resulted in a lower cost, but I believe in Mr. Putman's

16 mind that does not negate the imprudency dating back to

17 2004, and I think that's the point you're trying to

18 make. My question is -- at least from my perspective is

19 they probably should have done what Mr. Putnam has

20 suggested, okay, if that was, indeed, the prudent thing

21 to do. But by them failing to do that -- and maybe they

22 stumbled into doing something different. If that

23 resulted in a lower overall cost, then the thing I'm

24 struggling with is going back to Mr. Putman assuming

25 that the Commission, based on Mr. Putman's testimony,

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1 were to render a decision ultimately based on the record

2 evidence of imprudency, then how do you award damages on

3 something where the end result of the reality was a

4 lower overall cost savings. I think that is what I'm

5 struggling with.

6 CHAIRMAN CARTER: Commissioner.

7 COMMISSIONER ARGENZIANO: I think I

8 understand, it is just that it really is a dangerous

9 slope.

10 COMMISSIONER SKOP: I wholeheartedly agree,

11 but then the thing is is it would be pretty easy to go

12 in and say you should have done this, and that is based

13 upon how the Commission deems on the record evidence and

14 reflection in that. What's hard to do is set damages

15 from that. If reality turned into a lower cost versus

16 the hypothetical of looking back at what they should

17 have done, but the overall cost savings was more in the

18 haphazard way. I agree it is a slippery slope, but also

19 one of the principles is if the Commission ultimately

20 finds imprudency, the Commission has to award damages.

21 And if actual damages are negative, then how do you

22 award damages?

23 COMMISSIONER ARGENZIANO: Well, let me ask you

24 this. Let's say because the bids were in front of them

25 there may have been cheaper opportunities at that time.

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1 I don't know if it was available. I am still trying to

2 put all the pieces together and I still have a lot more

3 information before I make a decision. But in your

4 scenario let's say we said, okay, you acted imprudently

5 maybe in '04, but you fixed it later on. What if that

6 were to happen again and it didn't get fixed later on,

7 and the next time it happened it cost more because of

8 that decision. Then can you turn around and say, well,

9 you the Public Service Commission said we fixed it and

10 that was okay, so we tried it again. I'm not saying the

11 company is going to do that, I'm just saying is that a

12 good precedent to make.

13 COMMISSIONER SKOP: I agree, you know, it's a

14 legal concept. It is hard for me, again, if you were to

15 look back to 2004 and say, you know what, you should

16 have done this. But, you know, then you have to look at

17 is it fair to -- you know, if the end result was at a

18 less cost, so damages would be negative, then the

19 question is what should you have done versus what, you

20 know, what the actual harm was.

21 But I agree with you, and that is one of the

22 things that troubles me. And another thing that

23 troubles me is some of these issues, these very issues

24 were never raised in the last docket. But a lot of

25 discussion now is focused on, you know, specific mines

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1 in Indonesia and all of that, so that is different from

2 the last docket.

3 But what troubles me, again, is I still firmly

4 believe, as in the prior Commission order, when it is

5 cost-effective to do so that an 80/20 blend should be

6 burned, and I think that is Mr. Putman's contention

7 based on what I have heard his testimony to be.

8 COMMISSIONER ARGENZIANO: Well, if you

9 remember -- Mr. Chair, if I may.

10 CHAIRMAN CARTER: You're recognized.

11 COMMISSIONER ARGENZIANO: I asked staff, I

12 believe it was yesterday, about what our charge really

13 is. And what it comes down to me is that -- and I don't

14 know, I guess maybe you are having the question of

15 should Progress have bought a particular type of coal or

16 any coal as long as it was the cheapest. And, of

17 course, we need to take into consideration the costs in

18 doing that. Would there be retrofitting and all that

19 kind of stuff. And I'm not sure how difficult that is

20 since I see other companies doing that. And what I

21 heard that this plant was built to take on different

22 coals. So is our main goal it seems to me in

23 determining prudency, what are we determining prudency

24 for? Is it the prudence that you didn't use a

25 particular -- the Powder River Basin, or was it that it

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1 was supposed to be the cheapest. And that is what you

2 with due diligence as a company are supposed to do.

3 That is what I'm focused on. And what I hear you saying

4 is that you may not be focused on the cheapest, but

5 where it is from.

6 COMMISSIONER SKOP: No, I think we are saying

7 a combination of the same things. I think in the prior

8 docket the Commission clearly established the fact, as

9 you correctly stated, these plants were built with the

10 inherent capability to burn an 80/20 blend. You know,

11 that capability was not maintained through the lapse of

12 the permits. And that the Commission in its prior order

13 found that when it was cost-effective to do so, that

14 they should burn an 80/20 blend. When it is not

15 cost-effective to do so, they could probably get away

16 with doing the 100 percent CAPP coal.

17 But what I'm struggling with, again, in 2004

18 they probably should have done some of the things

19 that -- you know, again, I don't want to get into the

20 merits, but what I am hearing in the record evidence

21 also is in 29A, you know, basically Progress has alleged

22 that they did something different, completely different

23 that resulted in an ultimate cost savings. And so the

24 question is, I guess, that I had to Mr. Putman is if, in

25 fact, they were, you know, perhaps imprudent in 2004,

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1 what would actual damages be if they did something that

2 resulted in an overall cost savings to the consumers,

3 even if they happened into that by mistake or what have

4 you. But ultimately, you know, you could be imprudent

5 but still have no damages, and I guess that is what I'm

6 trying to get Mr. Putman to evaluate based on, you know,

7 looking at 2004 versus what they actually did, which was

8 Mr. Burnett's question on burning a blend of

9 bituminous -- of domestic bituminous with international

10 bituminous, and which in 29A they have alleged was

11 cheaper than the PRB option.

12 THE WITNESS: Again, my position is the

13 concern about looking back and doing hindsight review.

14 Maybe an example will help that is not quite as

15 controversial. Off that 2004 bid, Progress Energy did

16 decide to buy some bituminous coal, and they bought that

17 based on the lowest cost bituminous coal offer. But

18 they made a decision that in spite of the fact that they

19 were offered coal for 2005, 2006, and 2007, they only

20 bought coal for 2005 and 2006 because it was their view,

21 based on the letter in the document, that they would

22 rather hold 2007 open for future opportunities.

23 Well, as it turns out 2007 for bituminous as

24 well as sub-bituminous was higher than it was in 2004.

25 So by deciding not to buy in 2007, it cost more money

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1 than that earlier decision. But I would never sit here

2 and say you should punish Progress Energy for not buying

3 in 2007, because in 2004 they thought that was a wise

4 decision. But if you say we're going to look back and

5 see what really happened, then you would look back and

6 say you didn't buy that coal in 2007. It was cheaper;

7 you made a mistake, we are going to punish you. That is

8 the kind of slippery slope I would not want to, in any

9 way, have utilities subjected to.

10 COMMISSIONER SKOP: And I wholeheartedly

11 agree. I mean, I'm trying to find out, you know,

12 listening to the testimony, you know, which testimony is

13 more credible, what numbers I should believe, and try to

14 establish if there was, you know, in my mind,

15 imprudency, then what are the appropriate damages to

16 remedy that.

17 But this one, like I say, there are many

18 different sets of numbers being tossed around here, and

19 I'm trying to correspond, you know, some of the

20 witnesses have alleged they should have done certain

21 things, and I'm looking at that with what was actually

22 done and trying to basically integrate those two and

23 understand what was the ultimate outcome. And if the

24 ultimate outcome was, in fact, a cheaper option, it

25 doesn't make it any less right, but at the end of the

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1 day by maybe mere coincidence it turned out cheaper.

2 So, again, I'm trying to understand and give, you know,

3 the appropriate weight to each of the respective

4 testimonies. I do appreciate your lengthy explanation

5 on this. Thank you.

6 MR. BURNETT: Mr. Chair.

7 CHAIRMAN CARTER: Mr. Burnett.

8 MR. BURNETT: Yes, sir. We had a homework

9 assignment from Commissioner Skop yesterday. I heard

10 him say that he wanted to get the numbers in 29A SO2

11 normalized, transportation normalized, as well as these

12 numbers off GJP-6 normalized for transportation. If it

13 helps, we have prepared that and can present it now.

14 COMMISSIONER SKOP: I'd be happy to see that,

15 Mr. Chair.

16 MR. BURNETT: We could also present it with

17 Mr. Weintraub. It's to your discretion. I just wanted

18 to let you know that we have done that.

19 COMMISSIONER SKOP: That would be better.

20 CHAIRMAN CARTER: I had rather do it that way.

21 That's not Mr. Putman's deal.

22 MR. BURNETT: Yes, sir. Thank you.

23 CHAIRMAN CARTER: Mr. McGlothlin, you're

24 recognized for redirect.

25 MR. McGLOTHLIN: Thank you.

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1 REDIRECT EXAMINATION

2 BY MR. McGLOTHLIN:

3 Q. And I want to begin with some questions that

4 address this conversation on 29A. I think it's

5 important to do. Mr. Putman, you have with you, do you

6 not, a copy of what was originally called your DJP-6,

7 which is the summary of the bids to the April 2004 RFP?

8 A. I have that.

9 Q. And is that the basis for the prices that you

10 think the company could have bought sub-bituminous coal

11 for delivery in 2006?

12 A. That's correct, those are the numbers I used.

13 Q. Now, I want to refer you to the answer in 29A.

14 Do you see the sentence that says, "The PRB coal, if it

15 was purchased in May 2006, was more expensive than the

16 base coal that it was blended with"?

17 A. I haven't found it yet.

18 Q. The fourth line in the answer.

19 A. Okay. Yes, I found it.

20 Q. Does the coal that was purchased in May 2006

21 have any relationship to the bids of the April 2004 RFP?

22 A. No. Well, ask that again.

23 Q. What was the PRB coal that was purchased in

24 May 2006, do you know?

25 A. The PRB coal that we recommended selected was

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1 Kennecott coal that would have been bought and delivered

2 in 2006.

3 Q. Yes. And is that the same as or different

4 from the coal that was purchased in May 2006 and blended

5 with base coal and actual purchase?

6 A. No, the bituminous coal they are talking about

7 is different than the coal shown on my Exhibit 1, Number

8 6.

9 Q. So the question is can you glean whether in

10 preparing 29A did Progress Energy base its price of the

11 delivered cost of sub-bituminous coal on your Exhibit

12 6 or on something else?

13 A. It must have been something else. In this

14 sentence that you quoted the PRB coal that was purchased

15 in May 2006, and there was no coal, sub-bituminous coal

16 purchased -- actually purchased in May 2006.

17 Q. Would you recall a test burn that occurred in

18 that time frame?

19 A. Oh, okay. Okay. Thank you. Yes, now --

20 okay. That was purchased in 2006, the Peabody coal for

21 test burn.

22 Q. So in terms of comparison of the price you

23 contend was available and should have been taken

24 advantage of from the '04 RFP as shown on 6, and the way

25 Progress Energy constructed 29A, can you tell us whether

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1 the company based its price on delivered PRB coal on the

2 April 2004 RFP or on something else?

3 A. It was not based on the 2004 RFP.

4 Q. Okay. Now, there is a column there that says

5 PRB transportation cost to terminal, and they range from

6 30 to $32 and change or dollars per ton, are those equal

7 too, less than, or more than the transportation

8 component of the April 2004 RFP as you understand it?

9 A. These numbers are more than the numbers used

10 in producing DJP-6.

11 Q. Okay. Now, with respect to the numbers shown

12 on the summary of bids to the April '04 RFP, the

13 evaluated utilized price, at what point in the process

14 of evaluating bids, identifying winners, and negotiating

15 contracts, does the utility secure transportation for

16 those tons?

17 A. The normal process in preparing to react to an

18 RFP would be to look at these bids, and look at the

19 winners of that, the lowest cost, and say, okay, these

20 are the ones I'm going to negotiate with. Now, I need

21 to go firm up my assumptions. They have got a bid in

22 hand from the coal supplier. The other piece that is

23 very important is they have got to firm up the

24 transportation part of it. They have put a number in

25 here that they say is what the transportation is going

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1 to be. They need to either have already an existing

2 contract that they can move that coal under, or they

3 need to go get a firm bid from a transportation supplier

4 that would match up, support their evaluation.

5 And to go off and negotiate with a coal

6 supplier when you don't have the transportation

7 component locked up would be dangerous. So the normal

8 process is before you start your negotiations, very

9 quickly, even a lot of times contemporaneously with

10 asking for coal bids, you ask for transportation bids,

11 you put them together, and then you know what it is you

12 are getting ready to negotiate. You would not want to

13 negotiate with a coal supplier, make a deal, and then go

14 out and tie up your transportation costs.

15 Q. You attached to your testimony, in addition to

16 this summary of all bids, a letter reporting to

17 management the purchases that resulted from the RFP of

18 2004, did you not?

19 A. That's correct.

20 Q. Do you have that available to you?

21 A. I do. It is Exhibit Number DJP-5.

22 Q. Now, I draw your attention to the discussion

23 of the purchases that were made as a result of the RFP

24 process and also the report of the cost in dollars per

25 MMBtu at which those purchases will be delivered to the

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1 plant site. Do you see that purchase?

2 A. Yes.

3 Q. When one correlates that report of what the

4 delivered purchased price was going to be to the

5 evaluated utilized costs shown on the DJP-6, can you

6 ascertain whether the contract price reported including

7 transportation is equal to, less than, or more than the

8 evaluated cost?

9 A. The example would be on Page 2 of 4 of that

10 letter. Under domestic water it says that they have

11 purchased Delta coal, which is coal for Crystal River 4

12 and 5 from -- the first one is from Central Coal

13 Company, and that coal would ship and deliver into

14 Crystal River at $2.672 per million Btu. If you go back

15 to the bid sheets and find that Central Coal is down in

16 the Central Appalachian coals in the middle, the second

17 one down, you will see if you go across for the cash

18 cost, not the evaluated cost, but the cash cost is

19 2.672, which lines up with the letter.

20 So what they are reporting is that they were

21 able to buy that Central Coal at the price that they had

22 in their evaluation sheet. So obviously they bought the

23 coal at the price it was bid and they locked up the

24 transportation at the cost that was put into that

25 evaluation sheet.

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1 If you look on the following page under

2 domestic rail under Delta Coal, again, coal bought for

3 Crystal River 4 and 5, it talks about coal bought from

4 Massey Energy and at a delivered cost into Crystal River

5 at 2.693. If you go back to the bid sheet you will see

6 Massey Coal -- in this case it's the second Massey down,

7 the Van Mill mine (phonetic). If you go across again,

8 the cash cost is 2.693.

9 Now, I will point out the difference between

10 the cash cost and the evaluated cost. The evaluated

11 cost includes the impact of operation in the boiler. It

12 is used for decision-making. But once you decide on

13 what you are actually going to pay to the coal supplier

14 and transportation supplier is the cash cost. So that

15 is what you pay. You make your decision based on the

16 evaluated cost.

17 Q. Based upon the examples that you gave, do I

18 understand correctly that with respect to the purchases

19 actually made as a result of the RFP process in 2004,

20 the evaluated price including transportation was

21 translated into a contract with the same price including

22 transportation?

23 A. That's correct.

24 Q. In your experience, and you have had

25 experience in terms of conducting RFPs and contracting

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1 with bidders, have you not?

2 A. That's correct. For a period of time I

3 managed Southern Company's procurement, and we were the

4 largest coal buyer in the United States, and one of the

5 top two or three in the world.

6 Q. Would a situation in which an RFP process that

7 led to an evaluated cost subsequently translated into a

8 contract at the same or very nearly the same cost be

9 typical or atypical?

10 A. It should be typical. That's the way it ought

11 to work.

12 Q. Would you expect that to be true not only of

13 the bituminous purchases that were made, but of the

14 sub-bituminous offers that were there for the taking?

15 A. I would expect the process to work the same.

16 If you are going to buy something and negotiate

17 something, you better tie up the transportation costs at

18 the same time you are tying up the coal costs, yes.

19 Q. Now, you have heard references to and

20 descriptions of the transportation component of this

21 evaluated cost referred to as forecasts and you have

22 heard people say that your assumptions on the

23 transportation costs were in error because they

24 subsequently increased. Do you accept and agree with

25 the proposition that the delivered costs shown in the

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1 summary bids was subject to significant increases in the

2 transportation component?

3 A. It should not be. Before it got on this

4 sheet, somebody at Progress Energy should have

5 determined what was available for transportation and had

6 a good handle on that.

7 Q. So if that process had unfolded as you say it

8 should have unfolded, if it had taken place in exactly

9 the same way they were converting the offers for

10 bituminous coal into contracts at exactly the same price

11 including transportation. In your opinion, what should

12 the delivered cost of PRB on -- what should it be on 29A

13 for comparison with the other transactions?

14 A. The PRB delivered cost to terminals number?

15 Q. Well, let me ask you this. At what point of

16 delivery do the evaluated costs shown on your

17 Exhibit 6 assume?

18 A. All the way to the Crystal River plant.

19 Q. So even if we used the evaluated costs shown

20 for delivery to the plant, which includes more legs of

21 the transportation than does 29A, can you tell us

22 whether the prices bid into the 2004 RFP for

23 sub-bituminous coal were equal to, more than, or less

24 than the prices shown for the spot purchases and the

25 blend purchases here?

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1 A. The prices that were available in 2004 under

2 this inquiry are lower than the prices shown on the 29A

3 answer, that they were -- 29A indicates a higher

4 transportation cost and probably a higher coal cost than

5 is shown on Exhibit 6.

6 Q. So if 29A were modified to include that last

7 transportation leg to the terminal, would the

8 differential between what's shown for the bituminous

9 purchases and the delivered cost of the evaluated cost

10 in the RFP from '04 increase or decrease?

11 A. They would increase on 29A.

12 Q. In that instance would the PRB purchases be

13 more or less attractive compared to the bituminous

14 purchases reported on 29A?

15 A. Would you ask that again?

16 Q. Yes. If you fold in the additional component

17 of transportation cost that is not shown on this sheet

18 and compare that to the corresponding delivery costs

19 shown in the evaluated cost from the 2004 RFP, would the

20 sub-bituminous coal bids be more attractive or less

21 attractive in terms of the differential between the

22 costs?

23 A. The 29A numbers would be less attractive

24 compared to Exhibit 6.

25 Q. When you say the 29A prices, are you referring

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1 to the bituminous purchases there?

2 A. I'm really referring to both of them.

3 Bituminous coal would be less attractive than the

4 bituminous coal in 6. Sub-bituminous would be less

5 attractive than the sub-bituminous on Exhibit 6.

6 Q. I see what you're saying. All right. Now,

7 with respect to the blending, I'll refer you to the

8 answer in 29A, one, two, three, four, five, six, about

9 six lines in it says in the summer of 2007, Progress

10 Energy was offered and purchased low quality Central

11 Appalachian coal that was a cost-effective blend coal.

12 Do you see that?

13 A. I do.

14 Q. If the coal was offered in the summer of 2007,

15 when would it have been delivered, if you know?

16 A. I assume it would have been delivered shortly

17 after that in a spot market kind of buy.

18 Q. Does 29A shed any light on the volumes of the

19 lower bituminous coal that were blended in that fashion?

20 A. No, I do not see any tonnage numbers on here.

21 Q. And does 29A address, in any fashion, the

22 corresponding savings that could have been achieved in

23 2006 with the PRB blend?

24 A. It does not.

25 Q. Based upon the information available to you,

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1 Mr. Putman, do you think the savings that should have

2 been accomplished by virtue of purchases of

3 sub-bituminous coal for delivery in the 2006 and 2007 on

4 the one hand, and the blending of lower Btu bituminous

5 coal with higher Btu bituminous coal that began sometime

6 in the summer of 2007 on the other hand, are those two

7 measures necessarily mutually exclusive?

8 A. They are not mutually exclusive.

9 Q. If they are not mutually exclusive, does the

10 blending of the bituminous coals referred to in 29A do

11 anything to cover or mitigate the savings that could

12 have been accomplished with the purchases of the

13 sub-bituminous coal emanating from the 2004 RFP and the

14 opportunity presented by the Indonesian coal?

15 A. It is my stated opinion that both of them

16 could have existed. You could have captured the value

17 of the blend based on 2004, and then later in 2007 when

18 this opportunity became available, it could have been

19 captured, too, if it was a real savings. I do not feel

20 that it does mitigate it.

21 Q. Yesterday you were asked some questions about

22 the design basis coal. Preliminarily, and to set the

23 stage for further questions, would you describe for the

24 Commission your understanding of the significance of the

25 design basis coal, speaking generally at this point.

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1 A. When you design a unit you have to decide what

2 kind of coal you expect to burn in it, and you come up

3 with a design basis coal. And the design basis coal is

4 going to have all the characteristics of a coal that you

5 would expect to burn and then the engineers go about

6 designing the unit in such a way that it will

7 successfully burn around that design basis coal.

8 Q. And as you understand it, what is the design

9 basis fuel for Crystal River 4 and 5?

10 A. It was a 50/50 blend of eastern bituminous

11 coal and western sub-bituminous coal.

12 Q. And what is the significance of the

13 geographical designations in the design basis coal?

14 A. It was a shorthand for saying bituminous

15 eastern coal and sub-bituminous coal out of the Powder

16 River Basin area. Powder River Basin being a broad term

17 not restricted to states.

18 Q. As you understand the use of the design basis

19 coal, is there any relationship between the

20 specification of the design basis coal on the one hand

21 and reliability of deliverability on the other?

22 A. No. It's a coal, the expectation is that you

23 are going to be able to get that coal to your plant.

24 Q. Is the purpose of the design basis fuel to

25 limit the geographical origins of the coal to be burned

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1 in the unit?

2 A. No. The decision on a design basis coal is to

3 sort of set some parameters for design. What will then

4 happen is the engineering company would meet with the

5 utility who is purchasing this and decide how broad a

6 range around that design coal they want that plant to be

7 built. Whether they want to build a narrow plant that

8 can only burn one particular narrow kind of coal, or

9 they want to broaden around that design basis midpoint

10 so that they can burn a wider range of coal, that is a

11 decision made between the buying utility and the

12 engineering firm to implement that decision.

13 Q. There were some questions and answers

14 yesterday about the e-mail from the representative of

15 PT Adaro describing that there was -- that firm had no

16 coal to offer in 2007. What is the time frame of the --

17 what is the period during which your recommendations

18 would have effect in terms of deliveries to Crystal

19 River 4 and 5?

20 A. The bid was made in the February 2006 time

21 period. The expectation would be if you were going to

22 buy that you would put that in place, contract for that

23 within 30 or 60 days, around that time, and deliveries

24 would have started January 1st, 2007.

25 Q. Do you see any relationship to the bid that

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1 was submitted in February 2006 and the statement that

2 the same company had no coal to offer in 2007?

3 A. I do not see that different time frame.

4 Q. Again drawing on your experience with being

5 involved with RFPs, bids, contracting, do you have an

6 opinion as to what the consequences would be if an

7 entity were to submit a bid and then it were discovered

8 that the bid had no coal to back it up?

9 A. It would be very damaging to the bidders, the

10 coal company's reputation. It would make every bid

11 thereafter suspect and would have a serious impact on

12 that company's reputation and success.

13 Q. Now I believe yesterday there was reference to

14 the practice of submitting bids that are subject to

15 prior sale. Based on your experience, is that typical

16 or atypical in the industry?

17 A. I'd say that was fairly typical. And I would

18 also say that if a company makes that kind of an offer

19 subject to prior sale and they sell it, they are very

20 quick to inform the utility that that coal is no longer

21 available to protect their reputation, and they would

22 usually do that in writing.

23 Q. You were asked some questions about the

24 delivery risk associated with the Indonesian coal. Do

25 you recall that question and answer?

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1 A. I do.

2 Q. Do other coals at other geographic locations

3 have delivery risks associated with them?

4 A. Yes. All coals have their own sets and kinds

5 of risk about delivery. Yes.

6 Q. Given that each origin of coal has associated

7 with it a delivery risk, in your experience and in your

8 opinion what's the best way for a utility to manage

9 those risks?

10 A. The best way to manage risks about either both

11 price and delivery is to have a range of options that

12 you can call on. So if you buy coal by rail out of

13 Central Appalachia and buy coal by barge down the

14 Mississippi River and buy coal by oceangoing vessels

15 from South America or Indonesia, then you've got

16 multiple delivery paths. If one of them becomes

17 disrupted, you can increase the other flows and mitigate

18 your risk that way.

19 Q. You were asked some questions about the, the

20 graph showing, that's captioned Coal Costs/Quality

21 Gradient, and I believe in your answer you said time is

22 a more important consideration than quantity. Do you

23 remember that question and answer?

24 A. Yes, I do, and that was my response.

25 Q. Would you elaborate on what you meant when you

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1 said that time is a more important consideration?

2 A. The coal market is a volatile market; it goes

3 up and down over time. And so pricing of any kind of an

4 offer, spot coal, contract coal, is heavily dependent on

5 what is the market expectation at the time an offer is

6 made. Is the supplier expecting the prices to go up, do

7 they expect them to go down? So they're trying to tie

8 in a price now to get a higher price than when it goes

9 down. All those expectations, everybody has got one,

10 the supplier has got a set, the buyer has got a set, it

11 drives the price significantly. And in a volatile

12 market, just like buying stock in the stock market, what

13 are your expectations? That makes a big difference

14 about what you're going to pay.

15 The quantity is going to be based on what the

16 coal supplier has got on hand, issues that really are

17 less important to everybody than the timing and market

18 expectations.

19 Q. Can you determine the two different periods of

20 time that are reflected in this Coal Cost/Quantity

21 Gradient handout?

22 A. I can define the bottom number because as I

23 understand it that was the PRB Peabody bid that was for

24 the test burn. I don't know the timing or even what the

25 top box is based on.

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1 Q. And to be clear, do you accept the Peabody,

2 the cost of the Peabody transaction as representative of

3 what the price the utility would have paid for

4 deliveries in 2006?

5 A. Bought in that month at that time that was a,

6 a price that was available. Yes.

7 Q. But is it the price that was available to

8 Progress Energy had it taken advantage of the offers in

9 the earlier RFP?

10 A. If they had bought that same quantity coal in

11 2004, it would have been a lower price, again, because

12 of timing.

13 Q. The, the graph shows a straight line

14 connecting two points. In your experience, is there a

15 straight line linear correlation between the data points

16 shown on this graph?

17 A. It is my experience that there is not a

18 straight line correlation between quantity and price.

19 It is too dependent -- even in the same time period it's

20 depending on what a supplier has got, what he's got

21 available, how many tons he's got to sell.

22 Q. I believe Commissioner Argenziano asked you a

23 question about the design of the unit that corresponded

24 to the design basis fuel. Can you describe whether

25 there is a range of design criteria that range from

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1 conservative to less conservative design principles when

2 building a power plant corresponding to a design basis

3 fuel?

4 A. Yes. Again, I describe the design basis fuel

5 as sort of the center point or a point on the design,

6 and then the decision is to, how wide do we go around

7 that design basis fuel. If, for example, the design

8 basis fuel has a particular slagging and fouling

9 characteristic -- slagging and fouling is what occurs in

10 a boiler, can occur in a boiler to clog up the air flow

11 passages where the hot gases flow through the boiler.

12 If you have a lot of slagging and fouling, it begins to

13 clog up around that and the flow becomes restricted, the

14 unit becomes less efficient, lots of problems occur. So

15 that's an important design characteristic.

16 So you look at the design fuel and say, okay,

17 this fuel has got these kind of characteristics. So you

18 can then agree, decide to buy a unit that's built in a

19 very narrow range around those kind of characteristics,

20 or you can say, no, let's build one that's more

21 conservative so that you can handle more slagging and

22 fouling or let's buy one that's very conservative so

23 that almost you can't slag and foul it up, it's not

24 going to be a problem. All those cost more money.

25 Every time you take an expanding step, it costs more

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1 money. And so that's the decision that gets made.

2 But, yes, you start with the design fuel and

3 you buy around that design fuel depending on do you want

4 a Volkswagen or do you want a Lexus.

5 Q. Now with respect to that continuum you

6 described from less conservative to more conservative,

7 where would Crystal River Units 4 and 5 fall in that?

8 A. Crystal River, and I complimented the prior

9 management, was a Lexus. It was one that was built to

10 have a wide range of capability around that design fuel

11 so that you didn't just have to buy that narrow design

12 fuel. You could buy a significant range of coals that

13 were worse and better than that design fuel.

14 Q. Staff asked you a question about the Vista

15 model results for 2004 and 2005. And in response you

16 said that you have learned that, as applied, Vista

17 apparently did not consider sodium well. Would you

18 elaborate on what you meant by that answer?

19 A. Sodium is a problem. Sodium is one of the

20 causes of slagging and fouling. That's an indicator.

21 Sodium is found in the ash of the coal. It's a small

22 amount, but what it does is it starts to stick on the

23 walls of the tubes and start this clogging process. And

24 it stays in sort of a liquid kind of state. And so once

25 it's there, it catches the next thing that comes along

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1 and it can build up over time. Plants have sub-blowers

2 that use steam to knock that stuff off the wall and keep

3 it clean; sort of a high-pressure cleaning process. But

4 it is a problem.

5 And the Spring Creek coal, not because of the

6 state it's in but just because of geological events that

7 occurred back in the billions of years ago, it has a

8 high sodium content. And people buy coal who are aware

9 of that say that that's something that you've got to

10 really be prepared to take care of.

11 And so it would be my expectation that the

12 Vista model would model that characteristic. Because

13 sodium is such a swinger of effects, if the sodium -- if

14 the model was any good, it would say an 8 percent sodium

15 coal is a whole lot worse than a 1 percent sodium coal.

16 And it should have showed up; it should have caused that

17 coal to have a higher utilization cost. And the fact

18 that it still ended up number one in the bid process

19 makes me suspect that it either was not run, the Vista

20 model was not run, or less likely that the Vista model

21 does not consider sodium.

22 But in any case, in reality I will admit it

23 should not have ended up number one, but it did. And in

24 my process I did not second-guess the model. I did not

25 second-guess the way Progress Energy ran it and the fact

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1 that it came up number one.

2 Q. Now you've mentioned in earlier answers that

3 Crystal River 4 and 5 were designed conservatively to

4 accommodate slagging and fouling properties in coal. Do

5 you recall saying that?

6 A. Yes.

7 Q. Is the Vista model configured in a way that

8 reflects the individual design and architecture of the

9 power plant that's being modeled?

10 A. The model is intended to be customized to fit

11 the specific design of the plant, both the physical

12 design and their cost structure. Because what you're

13 going to end up with is a cost of how much does it cost

14 to burn this particular coal.

15 So if it means that, for example, sodium is

16 going to cause slagging and fouling and you're going to

17 have to run the precipitator, I mean the sub-blowers

18 more with that coal than you would with a clean coal,

19 then that's going to add to the cost. So what you're

20 going to end up with is more cents per million, cents

21 per ton because of that. That's what the model is

22 supposed to do. You're supposed to model it based on

23 your unit.

24 Q. If the Vista model is configured to the

25 conservative design of 4 and 5, would the ability of

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1 the, of the units to accommodate coals that have the

2 slagging and fouling properties be reflected in the

3 output of that Vista run?

4 A. Yes. And, again, the Vista run is not going

5 to decide by itself what coal you're going to buy. What

6 the Vista model would do is, okay, if you compare

7 Crystal River 4 and 5 to some other less conservative

8 unit, it's going to cost less to burn that coal in

9 Crystal River than it is in this other one. It's still

10 going to cost more to burn a high-sodium coal in Crystal

11 River than a low-sodium coal, but it's not going to cost

12 as much as other units. So it's going to take that

13 conservatism into it. It's going to say, yes, there's a

14 cost for burning that low-sodium -- high-sodium coal.

15 Now you decide based on all the other factors, you the

16 company, is it still a good thing to do.

17 But, yes, it's going to take into account the

18 fact that that plant was designed with wide spacing

19 between its tubes so that it takes a longer time to

20 bridge that over, maybe it doesn't ever get bridged

21 over, and it can be kept clean. Yes.

22 Q. Does the fact that the Spring Creek coal or

23 the blend of which Spring Creek coal is a portion in the

24 second bid for Kennecott, does the fact that that coal

25 is going to be blended 20/80 with bituminous coal

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1 containing less sodium have an effect on the extent of

2 any sodium impacts in Crystal River 4 and 5?

3 A. Absolutely. Because it means that you're only

4 putting 20 percent of the total flow of coal into that

5 unit is the high-sodium coal. It's still going to have

6 some impact, but it's significantly reduced by that

7 ratio so that you can't look at just Spring Creek coal

8 and say, ooh, this is bad, because it's -- a lot of the

9 Btus, a lot of the flow is going to come from the

10 bituminous coal that doesn't have the problem to combine

11 with the sub-bituminous Spring Creek coal that does have

12 the problem. So it reduces the problem.

13 Q. Have you had an opportunity to calculate the

14 effective sodium content of the 20/80 blend when Spring

15 Creek is blended with, with bituminous coal?

16 A. I did look at that and I did run a sheet to

17 evaluate, show that.

18 Q. And what does the calculation, what does that

19 calculation show?

20 A. I'm going to have to ask for my sheet that I

21 ran that I hope Earl's got.

22 CHAIRMAN CARTER: Mr. McGlothlin, would you

23 yield for a moment, please, sir?

24 COMMISSIONER SKOP: Mr. Chair, I probably can

25 reserve until Mr. McGlothlin is done.

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1 CHAIRMAN CARTER: You want to wait? Okay.

2 MR. McGLOTHLIN: I'm sorry. Was your question

3 how much longer do I have or do I want to yield?

4 CHAIRMAN CARTER: It's kind of hard to hear in

5 here sometimes, isn't it?

6 MR. McGLOTHLIN: I'm sorry.

7 CHAIRMAN CARTER: You may proceed.

8 MR. McGLOTHLIN: Mr. Poucher is distributing a

9 document captioned Effects of Blending Sodium in

10 Different Coals. May we have an exhibit number on that?

11 CHAIRMAN CARTER: Commissioners, for the

12 record this will be Exhibit Number 57. Exhibit Number

13 57. We'll just say Effects of Blending Sodium in Coal

14 or something like -- is that okay, Mr. McGlothlin? Will

15 that work for you as a short title?

16 MR. McGLOTHLIN: Yes, sir.

17 (Exhibit 57 marked for identification.)

18 COMMISSIONER SKOP: Mr. Chair.

19 CHAIRMAN CARTER: Commissioner Skop.

20 COMMISSIONER SKOP: Thank you, Mr. Chair.

21 We've been going for quite some time. Would it be

22 possible to take like a brief three-minute break or a

23 five-minute?

24 CHAIRMAN CARTER: Mr. McGlothlin is in his

25 stride.

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1 (Laughter.)

2 COMMISSIONER SKOP: Duty calls.

3 MR. McGLOTHLIN: A break is fine.

4 CHAIRMAN CARTER: Is that okay with you,

5 Mr. McGlothlin?

6 MR. McGLOTHLIN: Yes, sir. Yes, sir.

7 CHAIRMAN CARTER: Okay. Then let's do this,

8 Commissioners. Let's take five. We're on recess for

9 five. We'll come back at, on the hour.

10 (Recess taken.)

11 We are back on record. Mr. McGlothlin, you

12 may proceed.

13 MR. McGLOTHLIN: Thank you.

14 BY MR. McGLOTHLIN:

15 Q. Mr. Putman, prior to the break we had

16 distributed a document that's been marked Exhibit 57.

17 Do you have it in front of you?

18 A. I do.

19 Q. The first page is captioned Effect of Blending

20 Sodium in Different Coals. Would you describe for the

21 Commissioners the information that is contained on that

22 page?

23 A. This is a discussion of what happens as you

24 blend sodium. The first thing you need to know is that

25 sodium is measured in terms of percentage in the ash,

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1 not percentage of the overall coal. First you take out

2 the ash part of the total coal and then you divide it up

3 on a percentage basis to the components that are in the

4 ash, and sodium is one of those that's measured that

5 way.

6 So that a CAPP coal with an ash of 15 percent

7 and a 1 percent sodium produces a relatively small

8 amount of sodium. The sub-bituminous coal that we're

9 talking about with a 5 percent ash and an 8 percent

10 sodium produces a small amount of sodium. And if you

11 follow the numbers underneath that, CAPP coal sodium for

12 800,000 tons, and I'm making a 80/20 blend, 800,000 tons

13 of CAPP coal with a 13 percent ash, you get 104,000 tons

14 of ash. And if you multiply that by a .01 sodium, you

15 get 1,040 tons of sodium. And if you combine that with

16 a sub-bituminous coal, twenty -- 200,000 tons, again

17 making the 80/20 blend, with a 5 percent ash, you get

18 10,000 tons of ash. With the sodium part of that of

19 8 percent of the ash, you get 800 tons of sodium. You

20 blend that, you get this one million eight hundred -- I

21 mean 1,840 tons of sodium divided by the total tons of

22 ash, not the tons of coal but the tons of ash, and you

23 get a 1.61 percent sodium in this blend.

24 So, again, you start off with a high

25 sub-bituminous Spring River kind of sodium of 8 percent,

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1 you blend it with a low-sodium CAPP coal, and you end up

2 with a number 1.61, which is down more in the normal

3 kind of range of what you'll see in, in other kinds of

4 coal.

5 CHAIRMAN CARTER: Mr. McGlothlin, would you

6 yield for a moment?

7 MR. McGLOTHLIN: Yes, sir.

8 CHAIRMAN CARTER: Had you finished, Mr.

9 Putman?

10 THE WITNESS: Pardon?

11 CHAIRMAN CARTER: You go ahead and finish your

12 answer.

13 MR. McGLOTHLIN: Have you completed your

14 answer?

15 THE WITNESS: Yes. That's my answer. Yes.

16 CHAIRMAN CARTER: Okay. Would you yield for a

17 moment?

18 MR. McGLOTHLIN: Yes, sir.

19 CHAIRMAN CARTER: Thank you.

20 Commissioner Skop, you're recognized.

21 COMMISSIONER SKOP: Thank you, Mr. Chairman.

22 Just a quick point of clarification on the

23 calculation that we're looking at in terms of the

24 blending of different coals. Are we to assume that the

25 sub-bituminous coal listed in this exhibit is the

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1 Springhill, I mean, Spring Creek coal?

2 THE WITNESS: Yes.

3 COMMISSIONER SKOP: All right. Thank you.

4 CHAIRMAN CARTER: You may proceed.

5 BY MR. McGLOTHLIN:

6 Q. Thank you, Commissioner. That was going to be

7 my next question.

8 And just to follow through on that,

9 Mr. Putman, the CAPP coal there, is that representative

10 of the type of bituminous coal that would be blended

11 with the Spring Creek coal at Crystal River 4 and 5?

12 A. It's representative of CAPP coal. Yes.

13 Q. And to be clear, the Spring Creek coal that

14 was shown having a sodium percentage of 8 percent, on a

15 standalone basis and for the Commissioners, what does

16 the effect of, what does the effect of blending

17 20/80 with the CAPP coal have on the corresponding

18 sodium content of the blended coal?

19 A. The blended coal comes out to be a

20 1.61 percent of the ash is sodium.

21 Q. Now if you know, do power plants have

22 associated with them what would be a normal range of the

23 sodium content that could be expected to accommodate

24 without difficulty?

25 A. Yes. Any power plant, once built, will have a

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1 range that it can accommodate and then it will probably

2 have a range of preferred level of sodium. I mean,

3 power plant operators like to have perfect coal and so

4 they've got ones they prefer, but then the unit was

5 designed to handle a range.

6 Q. What would the normal range be in your

7 experience?

8 A. I'm not sure there's a normal range. Every

9 plant is different, and it goes back to what were the

10 decisions made at the time the unit was purchased.

11 Q. Have you had occasion to compare the effective

12 content of sodium, the 1.61 percent associated with this

13 blend, with the corresponding sodium content of design

14 basis fuel for Crystal River 4 and 5?

15 A. It falls within an acceptable range of the

16 design fuel.

17 Q. What would you conclude from that, from that

18 comparison?

19 A. That this plant, Crystal River 4 and 5 were

20 built and designed to burn a coal range that is actually

21 bigger than this 1.61 percent. So it would -- these

22 units were built to burn this kind of coal.

23 Q. Mr. Putman, have you heard the term "sodium

24 conditioning" as it relates to power plant operations?

25 A. I have.

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1 Q. What does it mean?

2 A. It has to do with the gas flow through the

3 precipitator. Sodium and working with ash allows the

4 resistivity of the ash to be more conducive to being

5 collected in the precipitator. So whereas sodium may be

6 a problem in the boiler, it becomes a help in the

7 precipitator. Air flow going through the precipitator

8 is -- the precipitator is built electrically. It

9 creates an electric field. The ash flows because of

10 that electric field based on its resistivity.

11 The resistivity of a low sulfur coal makes it

12 more difficult to collect. The resistivity of sodium

13 added to that combines with the ash, makes the ash

14 easier, more effective to collect.

15 So some plants who are burning a low sulfur

16 coal and have a small precipitator add sodium into the

17 air flow to allow that smaller precipitator to be more

18 effective to collect the ash flowing through the

19 precipitator.

20 Q. If you know, do any of the producers of coal

21 add sodium at the mine in response to a request that it

22 be done by utilities?

23 A. Yes. Several of the producers in the Wyoming

24 area that produce a low sodium and low sulfur coal offer

25 as part of a deal that they will put some sodium into

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1 the coal as it's loaded onto railcars so that they don't

2 have to install a sodium injection system at the plant.

3 The coal has sodium as it flows through the boiler and

4 through the precipitator.

5 Q. Mr. Burnett asked you if your calculations

6 assumed that the, whether the quantity of waterborne

7 coal that you included encompassed those tons delivered

8 at the Alabama State Docks. Do you recall that?

9 A. Yes.

10 Q. And he asked you if you were aware that

11 Progress Energy does not currently have a contract for

12 blending services at Alabama State Docks. Do you recall

13 that?

14 A. I recall that.

15 Q. And you said the fact that the company does

16 not currently have a contract would not alter your

17 decision to include those tons of coal. Would you

18 explain why that would not affect your analysis?

19 A. The Commission last, in the last docket said

20 that it would be a good thing to blend 20 percent coal

21 offsite. They would not recommend or support blending

22 onsite. They said it would be blended offsite.

23 Practically that means that that blending

24 needs to occur at a place where you can put the

25 bituminous and the sub-bituminous on the ground, blend

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1 it by weight and put it back into a barge to take to the

2 plant. You could also do that at a rail point, but

3 there's not a practical location to do that. So that's

4 why I focused in my analysis on waterborne coal.

5 But, so we looked at the coal that was

6 actually moved in tons to Crystal River in 2006, 2007

7 and said in this hypothetical if they were to have

8 bought coal, Powder River Basin coal with the intent to

9 blend it with all waterborne coal, some of that

10 sub-bituminous coal would have gone to IMT, some of it

11 would need to go to another place where waterborne coal

12 was being received in order to blend with that

13 waterborne coal. That other place, especially in 2007,

14 was at the Alabama State Docks.

15 So if they were implementing the plan to have

16 bought this sub-bituminous coal and to blend it, they

17 would need to take it to where the bituminous coal was,

18 which was at the Alabama State Docks, which would assume

19 that they would then go and get an agreement, a contract

20 with the State Docks to blend it just like they have a

21 contract at IMT to blend. So that's why I assumed in my

22 study because I am familiar with Alabama State Docks and

23 I know they do blending services.

24 Q. Does Alabama State Docks possess the

25 facilities with which to blend coal for customers?

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1 A. Absolutely. They are proud of their ability

2 to blend coal. That's what they do.

3 Q. Do they hold themselves out as providing that

4 service for their clients and customers?

5 A. Yes, they do.

6 Q. If Progress Energy had an opportunity to lower

7 its fuel costs and lower the customers' bills

8 accordingly by blending sub-bituminous and bituminous

9 coals at Alabama State Docks, would they have an

10 incentive to enter such a contract?

11 A. Would Alabama State Docks have an incentive?

12 Q. Would Progress Energy?

13 A. Yes. Progress Energy would have an incentive

14 if they were looking out for their customers, and State

15 Docks would have an incentive to capture that business.

16 Q. Mr. Burnett asked you some questions about the

17 subject of the possible double-counting of SO2 credits

18 in your calculations. Do you recall that?

19 A. I do.

20 Q. And you said that you are not persuaded that

21 the evaluation exercise incorporates SO2 in the same

22 manner as the emission allowance calculation. Do you

23 recall that?

24 A. I do.

25 Q. What efforts have you made to ascertain the

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1 extent to which there is or is not double-counting in

2 your calculation?

3 A. I looked at the evaluation sheets for both the

4 2006, I mean, the 2004 inquiry and for the 2006 inquiry.

5 Those are in my exhibits: For 2004 it's DJP-6, for 2006

6 it's DJP-8.

7 For purposes of illustration, let's look at

8 DJP-8 because it spells out the utilization cost. If

9 you look at Page 1 of 2, and this again is a long

10 spreadsheet as opposed to a paging, you have to sort of

11 walk across the lines to get there. But if you look at

12 just for demonstration purposes the first bid, Glencore

13 LTD, and you were to walk all the way across that, you

14 would come to a line on the second page called

15 utilization cost per ton, straight ton. In this first

16 example that is 18 cents per straight ton is the cost of

17 utilization of this coal as determined by Progress

18 Energy.

19 If you go back a page, on this sheet there's

20 a, again on that same line, an SO2 price of $1,514.

21 This is the cost of an allowance as they viewed it to

22 exist when they made this evaluation in February 2006.

23 $1,514 for cost of an allowance.

24 So now if you were to run a calculation, and I

25 would like to pass around a sheet of paper --

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1 CHAIRMAN CARTER: One moment before you

2 proceed further. If you would yield for a moment.

3 COMMISSIONER SKOP: Thank you, Mr. Chairman.

4 I'm trying to follow the witness and I'm just not seeing

5 those numbers on the data we have. And I don't know if

6 there's a confidential issue or what have you, but I'm

7 trying to look at the same data and follow along. So

8 can somebody help me out with that?

9 MR. McGLOTHLIN: I may be able to help.

10 BY MR. McGLOTHLIN:

11 Q. Mr. Putman, do you have a more general

12 illustration of the points you're making that you can

13 provide the Commissioners?

14 A. I do, but it's important to be able to follow

15 that on the sheet. I will --

16 MR. McGLOTHLIN: Okay. I don't think there's

17 a confidentiality problem.

18 THE WITNESS: We cleared that last time.

19 COMMISSIONER SKOP: I guess I'm not, I'm not

20 even seeing it on the sheet. That's the problem.

21 THE WITNESS: You got DJP-8 out of my direct

22 testimony?

23 COMMISSIONER SKOP: I believe so.

24 MS. BENNETT: Mr. Chairman.

25 CHAIRMAN CARTER: Yes, ma'am, Ms. Bennett.

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1 MS. BENNETT: In the attachment to the

2 testimony DJP-8 is confidential, but in yesterday's

3 hearing Progress released the confidential information.

4 CHAIRMAN CARTER: Do you remember that number?

5 MS. BENNETT: And it's Exhibit 50.

6 CHAIRMAN CARTER: 50? Okay. Thank you,

7 Ms. Bennett. Commissioners.

8 THE WITNESS: I apologize.

9 CHAIRMAN CARTER: Mr. McGlothlin, you may

10 proceed.

11 THE WITNESS: Let me go back and make sure

12 everybody is there. Does everybody see Glencore LTD on

13 that? Y'all are still not seeing it.

14 (Pause.)

15 Is there a way I can help?

16 CHAIRMAN CARTER: You may proceed, unless

17 you're waiting on Mr. McGlothlin.

18 THE WITNESS: No. I'm -- if you follow that

19 top line across on the first --

20 MR. McGLOTHLIN: First --

21 CHAIRMAN CARTER: Have you got a question?

22 MR. McGLOTHLIN: I think we were concerned

23 that the Commissioners were not finding the specific

24 reference.

25 CHAIRMAN CARTER: We got it.

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1 MR. McGLOTHLIN: Everybody has it? All right.

2 CHAIRMAN CARTER: We got it.

3 BY MR. McGLOTHLIN:

4 Q. Please proceed, Mr. Putman, with your

5 explanation.

6 A. Okay. I'll just start on the first page

7 again. Glencore LTD, follow that top line across, on

8 the first page you'll find an SO2 price, $1,514. That

9 is the allowance price as assumed in the time they did

10 this sheet.

11 You proceed on to the second page, still on

12 that top line, again it's a continuous wide page.

13 You'll find towards the left-hand side a utilization

14 cost in dollars per ton, and that is 18 cents as the

15 utilization cost. Again, that is the output, as I

16 understand it, from the Vista run or some other similar

17 evaluation of the impact of the cost of that particular

18 coal in that particular unit would cost 18 cents.

19 Well, then I ran a calculation check and I

20 would like to have this passed out. And in keeping with

21 the other sheet, this one is also a wide sheet put

22 together in sort of short notice, so I apologize.

23 You'll have to unstaple it.

24 All right. This is a calculation that you

25 would go through to determine for a particular coal how

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1 many, how much you're going to have to spend in a

2 allowance cost based on a ton of this coal being burned,

3 assuming that there is no, that it's all, you're paying

4 allowances for all the emissions. Not just emissions

5 over some standard, but for all the emissions out of the

6 stack for sulfur.

7 And what you do is you take the quality of the

8 coal in Btus per pound, convert that into tons, and then

9 convert that into pounds of SO2. You multiply it by the

10 pounds of SO2 per million Btu. We'll talk about that.

11 Multiply that in another conversion and you multiply it

12 by the allowance cost, which is in dollars per ton SO2,

13 and you come out with the dollars per ton. Again, this

14 is not my best work, but hopefully we can work our way

15 through it.

16 When you remove the two conversions of

17 2,000 pounds per ton that cancel each other out, you end

18 up with an equation that you take -- and, again, the

19 example under that of the 12,200 Btus per pound is that

20 same Glencore coal. If you follow that line across, you

21 would find that that is a 12,200 Btu per pound. You

22 multiply it by its sulfur SO2 content, which you will

23 find on the second page, the third column, SO2 is 1.20.

24 What that is is in terms of pounds per SO2 per million

25 Btus. You multiply that by the allowance cost, which is

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1 $1,514, and you run all that math and you will find that

2 the cost of burning that coal in money you would spend

3 in allowances is $22.16. That's what it's going to cost

4 you to burn a ton of that coal. And that's a very big

5 number and it's a whole lot higher than the 18 cents

6 utilization cost shown on their chart.

7 And if you were to run those numbers and you

8 looked down at that utilization cost chart, you'll see

9 they're all significantly smaller than $22. But if you

10 were to run this same equation for all those numbers,

11 you would find that they don't match, that the cost in

12 allowances alone is higher than the total utilization

13 cost calculated by Progress Energy. So that said to me

14 that the utilization cost that's shown on this sheet did

15 not include the use of allowances based on the

16 $1,514 that they assumed at that point.

17 So that's what drove my assumption that the

18 Vista model, the utilization model did not include the

19 cost of sulfur allowances. And so that's why it was

20 necessary to follow the procedure that was developed

21 last case and run a comparison of the cost of allowances

22 for the coal as purchased and as received, the base

23 case, and compare that to the cost of the blended coal

24 that was proposed, and you come up with a savings by

25 using the blend on just the allowance part of it.

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1 MR. McGLOTHLIN: If I may -- first, Chairman

2 Carter, could we have an exhibit number assigned to

3 this?

4 CHAIRMAN CARTER: Okay. That would put us to,

5 that would give us Exhibit Number 58. 58. A title,

6 Mr. McGlothlin, short one.

7 MR. McGLOTHLIN: I'm trying -- the short is

8 the tricky part. Treatment of sulfur in evaluation

9 versus emission allowance cost.

10 CHAIRMAN CARTER: How about Sulfur Evaluation

11 Treatment, would that work with you?

12 MR. McGLOTHLIN: I agree that's shorter.

13 (Exhibit 58 marked for identification.)

14 CHAIRMAN CARTER: Okay. You may proceed.

15 MR. McGLOTHLIN: Only because that was a

16 lengthy explanation of a mathematical exercise, I'd like

17 to ask a couple of summarizing questions, if I could,

18 for the record.

19 CHAIRMAN CARTER: You may proceed.

20 BY MR. McGLOTHLIN:

21 Q. Mr. Putman, do I understand correctly that

22 Exhibit 58 is a mathematical computation that's based on

23 the information shown for the Glencore coal that is the

24 first entry in your DJP-8?

25 A. That is correct.

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1 Q. And you referred to a utilization cost of 18

2 cents. Is that the credit or penalty that the

3 evaluation process assigns to Glencore on the basis of

4 its sulfur content?

5 A. On the basis of all the contents of that coal

6 as compared to the utilization to the plant design. So

7 it's not just sulfur. It would be sodium, it would be

8 sulfur, it would be Btu, moisture, all the contents of

9 the coal.

10 Q. And what is the $22.16 with which you are

11 comparing the 18 cents?

12 A. It is the cost only of burning that coal based

13 on its sulfur SO2 emission and the cost of allowance.

14 Q. If the evaluation process took into account

15 fully the cost of emission allowances, SO2 emission

16 allowances, what would you, what would you expect the

17 relationship between the two values that you've

18 identified here to be?

19 A. It would be not quite a summation of those two

20 numbers, but it would be close to a summation of those

21 two numbers.

22 Q. And what does the differential between, the

23 differential between 18 cents on the one hand and

24 $22.16 on the other hand tell you with respect to

25 whether you have double counted the benefits of sodium,

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1 excuse me, of sulfur in your analysis?

2 A. It appears that the evaluation did not include

3 the effect of allowance costs, and therefore there was

4 not any double-dipping done.

5 Q. You were provided an answer to an

6 interrogatory that FPL, in which FPL indicated it had

7 rejected some Spring Creek coal because of high sodium

8 content. Do you recall that document?

9 A. I have that in front of me.

10 Q. Does it surprise you that the Scherer

11 operation would not be interested in the Spring Creek

12 coal?

13 A. What this says to me is that apparently Spring

14 Creek was a low-cost bid because otherwise they wouldn't

15 even comment on it, but that they elected to reject it.

16 But Plant Scherer was not designed to burn

17 sub-bituminous coal, so its design compared to its

18 designed coal would be much more conservative. So it

19 would be much more of a problem for that plant to burn a

20 high-sodium coal because the tubes, again, would be

21 closer together causing more of an opportunity for

22 bridging by slagging and fouling than the Crystal River

23 one. So it does not surprise me that Scherer would have

24 been more inclined to reject a high-sodium coal.

25 Q. You've spoken to the design, the difference in

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1 the designs of the plant. In response to a question

2 from Mr. Burnett, you acknowledged that at Scherer they

3 burn 100 percent sub-bituminous coal, do they not?

4 A. They do.

5 Q. Compared to the effect of the blending

6 20/80 on the sodium content at Crystal River 4 and 5,

7 what would the corresponding percentage of sodium be if

8 Scherer were to burn 100 percent Spring Creek coal?

9 A. It would be in the 8 percent range of full

10 Spring Creek sodium.

11 Q. And that 8 percent is compared to -- what was

12 the effect of blended sodium content for the Crystal

13 River 4 and 5?

14 A. 1.6 percent.

15 Q. Mr. Burnett asked you to agree that with

16 respect to the Spring Creek coal the transportation

17 costs of that particular coal would exceed the cost of

18 the commodity. Is that unique to Spring Creek coal or

19 is it true, applicable to other western coals as well?

20 A. It would be true for all the Powder River

21 Basin coal as I use that term. Moving to the southeast

22 United States, the transportation will be a bigger

23 component than FOB price number.

24 Q. Mr. Burnett asked you some questions regarding

25 the relationship between the use of the Spring Creek

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1 coal at Crystal River 4 and 5 on the one hand and the

2 installation of the scrubbers in those units on the

3 other. Are you aware of the status of the scrubber

4 project at Crystal River 4 and 5?

5 A. Only very generally. Generally.

6 Q. With respect to whether they are operational

7 now or when they are expected to be operational, do you

8 have information about that?

9 A. It's my understanding they are not operational

10 now but under construction and have a not too distant

11 start-up time, but I don't know the specifics.

12 Q. So the scrubbers would be 2009 or later;

13 correct?

14 A. That's my understanding.

15 Q. And for what period of time were you

16 recommending that the utility should have purchased and

17 delivered Spring Creek coal to Crystal River 4 and 5?

18 A. In reality I said they should have bought it

19 in 2005 and 2006. We're only focused on 2006 here

20 though.

21 Q. Would -- if they have delivered Spring Creek

22 coal in 2005 and 2006, would that have interfered with

23 anything the scrubbers are doing in 2009?

24 A. No.

25 Q. Mr. Burnett asked you some questions about the

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1 unloading rates at IMT. Do you recall those questions?

2 A. I do.

3 Q. What is your understanding of the value or the

4 rate that Progress Energy contends should be applied to

5 calculate an adjustment to your refund amount?

6 A. How many dollars do they say should be

7 adjusted?

8 Q. No. What rate, what unloading rate did they

9 use and what does it represent, if you know? Tons per

10 hour is what I'm talking about.

11 A. I'm not sure. The number 12,000 tons per day

12 is the number that sort of is in my head.

13 Q. If that is the maximum that's guaranteed by

14 the terminal, does that necessarily mean that's all they

15 can do?

16 A. No. You normally would guarantee something

17 that you are absolutely certain you can do that would

18 have some upside opportunity.

19 Q. You were asked about the low sulfur content of

20 the Indonesian coal. If you know, what is the sulfur

21 content of the Indonesian coals that were offered by

22 Adaro and Kideco?

23 A. One of them was one percent and the other one

24 was one and a half percent sulfur.

25 Q. And would they be blended 20/80 with the

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1 bituminous coal?

2 A. Yes, as required by the Commission.

3 Q. Would the blending of the Indonesian coal

4 containing the low sulfur content, would the bituminous

5 have an effect on the overall average of the sulfur

6 content?

7 A. Yes. If you blend the coal, you get a

8 different blended average.

9 Q. And have you calculated what the blended --

10 what the sulfur content of the blended coal would be?

11 A. Yes, I have, and that's attached to the

12 earlier handout.

13 Q. Tell the Commissioners what you did in that

14 regard.

15 A. This is Page 2 of -- I'm not sure what the

16 number of that was. It was the same sodium blending a

17 minute ago.

18 CHAIRMAN CARTER: Exhibit 58, the one you told

19 us to take apart.

20 THE WITNESS: No. Fifty-eight has got a cover

21 sheet.

22 CHAIRMAN CARTER: Okay. Got it.

23 THE WITNESS: It says cross-examination

24 exhibit and then it has got two pages under that.

25 CHAIRMAN CARTER: That is not 58.

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1 MS. BENNETT: It's 57.

2 CHAIRMAN CARTER: Okay.

3 THE WITNESS: Now we are looking at Page 1 of

4 that. It says effect of blending sulfur in different

5 coals. All right. This is, again -- here sulfur is

6 measured in percentage of the total weight of the coal.

7 Remember, sodium was total weight of the ash. This is

8 the total weight of the coal. We are, again, trying to

9 build an 80/20 blend of sub-bituminous coal using

10 800,000 tons and 200,000 tons.

11 I looked at two cases. Case 1 has a CAPP coal

12 sulfur of .74 and a sub-bituminous coal of .32. This

13 would be more in line with a Spring Creek coal from the

14 sulfur standpoint, and you would blend that and you will

15 end up with tons of sulfur for the CAPP coal of

16 5,920 tons of sulfur blended with the sub-bituminous

17 coal of 640,000 -- 640 tons of coal, and so the blend of

18 that 1 million tons is .66 percent sulfur.

19 Case 2 is more a sub-bituminous Indonesian

20 coal still blending with that CAPP coal of .74 percent,

21 but now the sub-bituminous coal is .1. You blend that.

22 And, again, this time for the sub-bituminous coal you

23 only produce 200 tons of sulfur. You add that, divide

24 that by the 1 million tons of coal and you get a blend

25 of .61 percent sulfur.

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1 Q. To be clear, Mr. Putman, in each of these

2 scenarios have you chosen values for the CAPP coal that

3 would be representative of the bituminous coal with

4 which the sub-bituminous coal would be blended at

5 Crystal River 4 and 5?

6 A. Yes.

7 Q. For Case 1, have you chosen a sulfur value

8 that would be typical of Powder River Basin coals that

9 would be blended 20/80?

10 A. Yes. Of Powder River Basin coal, yes.

11 Q. And in Case 2, have you included the sulfur

12 content that was specified by the producers of the

13 Indonesian coal that bid into the 2006 RFP?

14 A. For one of the bids, yes. One of them was .1

15 and the other was .15, yes.

16 Q. And what is the effective blended content of

17 sulfur with the more typical PRB coal as blended?

18 A. .66 percent.

19 Q. And what is the corresponding effective

20 blended content of sulfur when CAPP coal is mixed with

21 the Indonesian at 20/80?

22 A. .61 percent.

23 Q. Now, as I understand it, the concern with

24 respect to the very low sulfur content of the Indonesian

25 coal is that it could be too low and, therefore, could

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1 have a deleterious impact on the operation of the

2 precipitator, is that correct?

3 A. That's correct.

4 Q. Are you familiar with the range of sulfur

5 content that the precipitators installed at Crystal

6 River 4 and 5 can accommodate?

7 A. Again, they designed the precipitators in a

8 conservative manner. They built a large box, a large

9 box means that air flow has more time to pass through

10 the precipitator, more time to be exposed to the

11 electrostatic field, more time for ash to be collected.

12 So that was the design. As I sit here, I don't know the

13 exact number of the range for sulfur, but it was a wide

14 range from a very low to a higher sulfur coal.

15 Q. Would the values .66 and .61 fall within the

16 range, to your knowledge?

17 A. Yes.

18 Q. Now, one asks what is the ash --

19 A. Actually, I now have a piece of information.

20 Q. Okay.

21 A. Looking at the designed fuel, the designed

22 fuel for the blend was a sulfur of .49 percent. So this

23 coal at .61 and .66 hundredths is a higher sulfur than

24 this was designed to handle. Again, the problem is if

25 you go lower than the design then you would have some

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1 problems. If you were above that, then the precipitator

2 will perform adequately.

3 Q. What is the ash content of the Indonesian

4 coals that were offered?

5 A. Extremely low. The ash for the PT Adaro was

6 1.2 percent, for the Kideco, PT Kideco it was 3 percent.

7 Q. And what would be corresponding more typical

8 ash content of either the CAPP coal or a typical PRB

9 coal?

10 A. A typical PRB is going to be around 5 to 6

11 percent, a CAPP coal is going to be in the 8 to

12 12 percent range.

13 Q. What is the significance, if any, of the far

14 lower ash content of the Indonesian coal for performance

15 in the boiler and the performance of the precipitator?

16 A. Lower ash is extremely valuable in a coal. We

17 talked about that sodium is a measure of percent of the

18 ash. So if you start with a smaller quantity of ash,

19 even if you have the same percent, it's going to be less

20 sodium to stick on the walls of the tubes and cause

21 problems. So lower ash removes all the bad stuff that's

22 in coal, and so it is very valuable. You don't have to

23 collect it in the precipitator, because that is what

24 precipitators do is collect the ash. There is a lot

25 less to be collected. You have to dispose of ash. You

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1 have got to build a pond to put it in. Lots of costs

2 involved with dealing with ash, so less is extremely

3 valuable.

4 Q. You were shown a document which I believe was

5 in the nature of a news article or a press article to

6 the effect that the Scherer unit plan to test some

7 Indonesian coal. Do you recall seeing that?

8 A. Yes, I have it in front of me.

9 Q. And you inquired as to the publication date.

10 What is the significance of that?

11 A. Again, timing is everything. It has to do

12 with when they were going to be trying to buy coal, when

13 they were going to try to test coal, and put it into a

14 perspective of this case. And to my understanding it

15 was August of 2005.

16 Q. Does the idea that Scherer would test the

17 Indonesian coal surprise you?

18 A. No, it doesn't. Again, it's a reaction to a

19 problem in the market. We have heard about delivery

20 problems out of the Powder River Basin in 2005 that ran

21 over into 2006. And because of that, domestic delivery

22 risk, risks exists everywhere, it was necessary for

23 Plant Scherer to either run out of coal or to buy a coal

24 similar to what they were used to burning. The other

25 choice is they could have gone back to bituminous coal.

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1 They liked burning the sub-bituminous coal, so they went

2 out and bought a relatively short-term period

3 sub-bituminous coal that they were familiar with and

4 they burned it. They did pay a premium for that, but

5 they paid the premium as opposed to running out of coal.

6 So if you're hungry, you'll pay a price.

7 Q. You mentioned that this publication date was

8 August 2005, is that correct?

9 A. That's correct.

10 Q. And what was the time of the -- timing of the

11 disruptions in the deliveries from the west?

12 A. Similar. Most of 2005, and had some impact in

13 2006.

14 Q. And when did Scherer begin to burn the

15 Indonesian coal, if you know?

16 A. My review of the 4/23 data says in January of

17 2006 is when they began receiving it.

18 Q. Based upon the publication date of that

19 article and the date when they began to burn the

20 Indonesian coal, what do you infer about the time

21 required to test the Indonesian coal at Scherer before

22 beginning to burn it?

23 A. A relatively short time period to go from

24 apparently leaking to the public that they were looking

25 at it to when they actually had it received and burning

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1 it, a relatively short time. It doesn't say anything

2 about how long a particular test burn took in days once

3 they had coal there.

4 Q. What is the relationship, if any, between the

5 disruptions in deliveries they were experiencing from

6 western coals, on the one hand, and the price they paid

7 that Mr. Burnett showed you on the other hand?

8 A. Well, the sheet he handed out, which I don't

9 disagree with, they were spending four or five dollars

10 per million Btu when their normal price would be more

11 like $2 per million Btu.

12 Q. The fact that they paid that in 2006, does

13 that obviate, in your opinion, the legitimacy of the

14 lower bid that was submitted to Progress Energy in

15 February of 2006?

16 A. What it says to me is that there was a great

17 opportunity for a low price buy in February 2006 that

18 did not exist -- I mean, February -- yes, February 2006

19 that didn't exist later on.

20 Q. Mr. Burnett asked you some questions about

21 particular aspects of the equipment at Crystal River 4

22 and 5, and asked you if you had done an analysis, and

23 you said that you had performed some analysis after your

24 deposition. With respect to the analysis that you

25 performed, what documents did you review for that

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1 purpose?

2 A. I looked at some B&W design information, a

3 summary of the design of the plant.

4 MR. McGLOTHLIN: I'd like to distribute that

5 to the Commissioners at this point.

6 CHAIRMAN CARTER: By the way, Mr. McGlothlin,

7 we are fast coming upon the hour that we were going to

8 be taking a break for lunch. How much more do you have

9 to cover there?

10 MR. McGLOTHLIN: I'm nearing the end.

11 Probably another ten minutes, fifteen at the most.

12 CHAIRMAN CARTER: Well, then we are not going

13 to be able to accommodate that before lunch. This seems

14 like a good enough breaking point, and we'll come back

15 at 2:00. But, before we go, I just wanted to admonish

16 everyone that we will finish today. We don't have

17 another day on the calendar. So let's be prepared

18 and -- you know, let's be prepared to do it. We are

19 going to get it done today.

20 So with that, Commissioners, we will come back

21 at 2:00 o'clock.

22 (Lunch recess.)

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STATE OF FLORIDA )

2

: CERTIFICATE OF REPORTERS

3

COUNTY OF LEON )

4

5

6 WE, JANE FAUROT, RPR, and LINDA BOLES, RPR, CRR,

Official Commission Reporters, do hereby certify that

7 the foregoing proceeding was heard at the time and place

herein stated.

8

IT IS FURTHER CERTIFIED that we stenographically

9 reported the said proceedings; that the same has been

transcribed under our direct supervision; and that this

10 transcript constitutes a true transcription of our notes

of said proceedings.

11

WE FURTHER CERTIFY that we are not a relative,

12 employee, attorney or counsel of any of the parties, nor

are we a relative or employee of any of the parties'

13 attorneys or counsel connected with the action, nor are

we financially interested in the action.

14

15 DATED THIS 29th day of April, 2009.

16

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JANE FAUROT, RPR LINDA BOLES, RPR, CRR

18 Commission Reporter Commission Reporter

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