

060658-EI

**REDACTED PORTIONS OF
ALEXANDER WEINTRAUB
DIRECT TESTIMONY**

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1 (called “D” coal or compliance coal). We also wanted to see if we could meet our
2 hedging guidelines for the 2006 to 2010 time period. Basically, our guidelines at the
3 time sought to have under contract (through a formal RFP or spot purchase), [REDACTED] to
4 [REDACTED] of the coal needs for the next year, [REDACTED] to [REDACTED] of the coal needs for the
5 second year out [REDACTED] to [REDACTED] of the coal needs for the third year out, and an ever
6 decreasing percentage beyond that time period.

7 The RFP sought both domestic and import coal proposals for delivery by
8 water barge or rail to Crystal River. Bidders were required to provide available
9 analyses on the coal offered in the bids with both “typical” and “guaranteed” values.
10 As the names imply, “typical” values were the quality of the coal expected on each
11 shipment, and “guaranteed” values were the minimum quality specifications for the
12 coal shipments below which PEF could reject the shipment. We expressly told
13 potential bidders in the RFPs that their proposals would be evaluated not only on a
14 delivered cost basis but also on a performance cost basis including, but not limited to,
15 coal and ash handling impacts, generating station operating costs, and environmental
16 compliance. Bid proposals were due October 17, 2005. A copy of the September
17 2005 RFP for coals for CR4 and CR5 is Exhibit No. ____ (SAW-2) to my testimony.

18
19 **Q. Did the RFP for CR4 and CR5 coals include specifications for both bituminous**
20 **and sub-bituminous coal?**

21 **A.** Yes, it did. The required coal specifications included as received guaranteed
22 specifications for both bituminous and sub-bituminous coals. These required coal
23 specifications were consistent with the quality specifications historically used at CR4
24 and CR5.

1 "D" coal contract for the 2006-2008 time period at a base price of [REDACTED]/ton each
2 year. This price was well within the market price for compliance bituminous coal
3 under the bid proposals and therefore represented the most economical option for the
4 Company and the customer. We, therefore, renewed the Massey contract but made
5 no other compliance coal purchases as a result of the September 2005 RFP. Rather,
6 the prudent course was to wait for a later RFP for such coals because suppliers were
7 apparently "sitting on" compliance coal to see what was going to happen in the
8 market. A copy of the Company's summary evaluation of the September 2005 RFP
9 is Exhibit No. ____ (SAW-4) to my testimony.

10

11 **B. THE JANUARY 2006 SOLICITATION**

12

13 **Q. When was the next formal solicitation for coal for CR4 and CR5 following the**
14 **September 2005 RFP?**

15 **A.** In January 2006 we issued another RFP solicitation for coals meeting the coal quality
16 requirements for CR4 and CR5 with terms of one to three years. The RFP was
17 similar to the one issued in September 2005. It contained the same coal specifications
18 for bituminous and sub-bituminous coals and the same evaluation terms and
19 conditions. It was sent to over 100 potential coal suppliers on the Company's bidder
20 list, including PRB coal suppliers, and it was published in a number of well
21 recognized coal publications in the industry. Bid proposals were due in February
22 2006 to this RFP. A copy of the January 2006 RFP for coals for CR4 and CR5 is
23 Exhibit No. ____ (SAW-5) to my testimony.

24

1 **Q. Why did you issue a RFP in January 2006 when you had just completed one in**
2 **the fall of 2005?**

3 **A.** We issued another similar RFP in January 2006 to see if compliance coal suppliers
4 were going to release their coal under the current market conditions. As a result of
5 the September 2005 RFP, we did not receive a large number of D coal bids, we
6 received very few import bids, and we received no eastern bituminous bids for
7 delivery by water. As I explained, suppliers seemed to be “sitting on” compliance
8 coal to extract more favorable market prices. By re-entering the market with another
9 RFP in January 2006 we expected to see more compliance coal, especially import
10 compliance coal, available.

11

12 **Q. What were your compliance coal goals for the January 2006 RFP?**

13 **A.** We were targeting [REDACTED] tons for 2007 and just over [REDACTED] tons for 2008 for
14 CR4 and CR5. Thereafter, we targeted [REDACTED] for 2009. Our hedging targets
15 were just as they had been for the September 2005 RFP.

16

17 **Q. What was the response to this RFP?**

18 **A.** Out of the over 100 potential suppliers the RFP was sent to the Company received
19 bids from 22 suppliers with over 100 unique proposals. This response far exceeded
20 the response to the September 2005 RFP. The Company received only one proposal
21 for PRB coals, however, and that was from a coal broker. None of the major PRB
22 coal suppliers who received the RFP, such as Arch and Kennecott (by this time Arch
23 had purchased Triton), responded with a bid proposal to the RFP. A copy of the

1 bidder list indicating those suppliers who responded with bids or simply did not
2 respond at all to the January 2006 RFP is Exhibit No. ____ (SAW-6) to my testimony.

3
4 **Q. What were the results of the evaluation of the January 2006 RFP?**

5 **A.** For 2007, we entered into six contracts for [REDACTED] tons of compliance coal from
6 both domestic and import bituminous coal suppliers at an average of [REDACTED]/ton cost
7 (a range of [REDACTED]/ton to [REDACTED]/ton). Five of those suppliers also agreed to contracts
8 for over [REDACTED] tons of coal in 2008 at an average of [REDACTED]/ton (a range of
9 [REDACTED]/ton to [REDACTED]/ton) and two of them further contracted for the delivery of over
10 [REDACTED] tons in 2009 at an average of [REDACTED]/ton. As a result of this solicitation, the
11 Company met its objectives and guidelines for the RFP, provided CR4 and CR5 with
12 quality bituminous compliance coal, and purchased the most economical coal
13 available on the market. A copy of the Company's coal procurement plan for the
14 January-February 2006 RFP is Exhibit No. ____ (SAW-7) to my testimony.

15
16 **Q. Was the sole PRB offer in response to the January 2006 RFP a better value than
17 the bituminous coals that the Company purchases as a result of the RFP?**

18 **A.** No, it was not. But there were two Indonesian sub-bituminous coal offers that ranked
19 ahead of the bituminous coal bids we purchased. We did not purchase the Indonesian
20 sub-bituminous coal product because the plant had no prior experience with this type
21 of coal, the CR4 and CR5 units were undergoing modifications to safely handle the
22 PRB coals for a test burn as recommended by our outside engineering consultant, and
23 the test burn of PRB sub-bituminous coals had not yet occurred.

24

1 Q. How can you be sure that TECO does not include these terminal or transfer
2 charges in its FERC Form 423s?

3 A. Currently, PEF has a three-year current contract with IMT that expires on [REDACTED]
4 [REDACTED]. In preparation for the expiration of this contract, an RFP for transloading
5 services along the US Gulf Coast was issued on August 16, 2006. A bid was received
6 from TECO Bulk Terminal for their services at Electrocoal. The results of that bid
7 response show that TECO does not include these terminal or transfer charges when
8 accounting for coal inventory at the terminal.

9
10 Q. In her testimony, Ms. Davis indicates that, based on her former experience with
11 TECO, the transfer charges are not included in TECO's FERC Form 423s. Is
12 this fact consistent with what you learned from TECO's recent bid for
13 transloading services?

14 A. Yes, based on TECO's bid response, the terminal or transfer charges are still not
15 included in the inventory cost for coal at the Electrocoal terminal.

16

17 VI. CONCLUSION

18

19 Q. Does this conclude your testimony?

20 A. Yes.

21

PORTIONS OF SAW-4

PEF Coal Purchases From September 2005 RFP

PEF "A" Rail Coal															
Supplier	2006			2007			2008			2009			2010		
	Tons	Price	BTU												
Massey "A" Re-Opener	[REDACTED]	\$ [REDACTED]	[REDACTED]												
Trinity "A" Bid #15	[REDACTED]	\$ [REDACTED]	[REDACTED]												
B&W Resources "A" Bid #31L	[REDACTED]	\$ [REDACTED]	[REDACTED]												
Constellation "A" Bid #29L	[REDACTED]	\$ [REDACTED]	[REDACTED]												
CAM "A" Bid #4	[REDACTED]	\$ [REDACTED]	[REDACTED]												
Totals	[REDACTED]	\$ [REDACTED]	[REDACTED]												

PEF "D" Rail Coal															
Supplier	2006			2007			2008			2009			2010		
	Tons	Price	BTU												
Massey "D" Re-Opener	[REDACTED]	\$ [REDACTED]	[REDACTED]												
Totals	[REDACTED]	\$ [REDACTED]	[REDACTED]												

PEF															
Supplier	2006			2007			2008			2009			2010		
	Tons	Price	BTU												
Massey "A" Re-Opener	[REDACTED]	\$ [REDACTED]	[REDACTED]												
Trinity "A" Bid #15	[REDACTED]	\$ [REDACTED]	[REDACTED]												
B&W Resources "A" Bid #31L	[REDACTED]	\$ [REDACTED]	[REDACTED]												
Constellation "A" Bid #29L	[REDACTED]	\$ [REDACTED]	[REDACTED]												
CAM "A" Bid #4	[REDACTED]	\$ [REDACTED]	[REDACTED]												
Massey "D" Re-Opener	[REDACTED]	\$ [REDACTED]	[REDACTED]												
Totals	[REDACTED]	\$ [REDACTED]	[REDACTED]												

PEF Marked to Market

Progress Energy Florida - MtM and Market Prices

12/7/2005

	2006	2007	2008	2009	2010	Total
CSX-BSK 12500-1.2	\$ [REDACTED]					
CSX-BSK 12500-1.6	\$ [REDACTED]					
BS RVR 12000-1.2	\$ [REDACTED]					
Average Contract Price	\$ [REDACTED]					
MtM	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	\$ [REDACTED]

Default Exposure

Counterparty	2006	2007	2008	2009	2010	Total
Massey Price Reopener 2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
B&W Resources Bid 31L	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Massey Price Reopener 1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Trinity Bid 15	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
CAM - Kentucky LLC (pre Constellation Bid 29L	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

PEF Positions

Description	2006		2007		2008		2009		2010	
	Tons	Price								
PEF "A" Rail Coal										
CR 1&2 Contracted July GFF										
CR 1&2 Spot November GFF										
CR 1 & 2 Estimated Total										
CR 1&2 Contracted July GFF										
CR 1&2 Purchases										
CR 1 & 2 Spot November GFF										
CR 1 & 2 Estimated Total										
PEF "D" Overall										
CR 4 & 5 Contracted July GFF										
CR 4 & 5 Spot November GFF										
CR 4 & 5 Estimated Total										
CR 4 & 5 Contracted July GFF										
CR 4 & 5 Purchases										
CR 4 & 5 Spot November GFF										
CR 4 & 5 Estimated Total										
CR Contracted July GFF										
CR Purchases										
CR Spot November GFF										
CR Estimated Total										
Burn Forecast		2006		2007		2008		2009		2010
Hedging Guidelines		5,225		6,005		5,658		5,798		5,970
Prior to RFP										
After RFP										

PORTIONS OF SAW-7

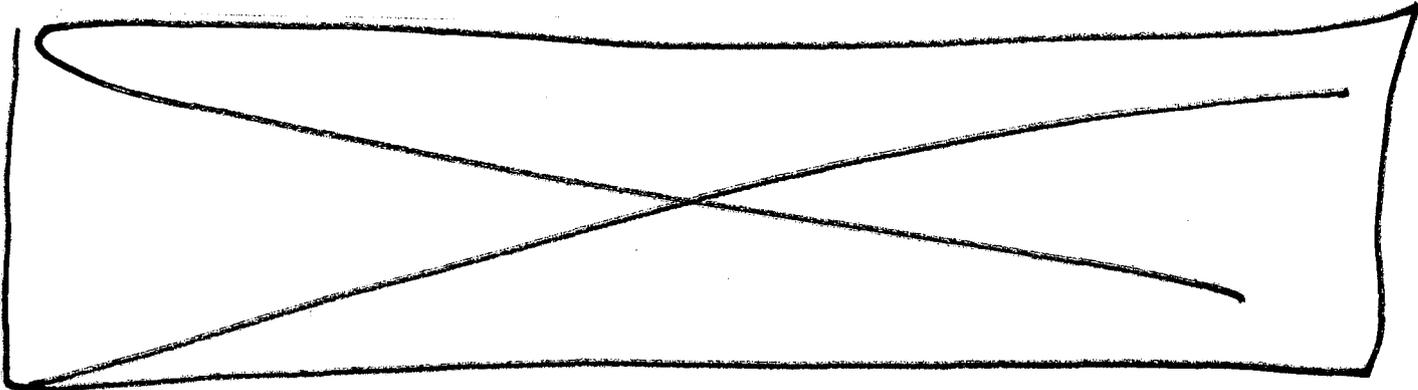
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PEF COAL PROCUREMENT

The outcomes of this Request for Proposal will support the Regulated Fuels Department 2006 Business Plan' strategy for environmental compliance. This strategy's key initiative is to purchase coal for delivery in years 2007-2009. Coal suppliers from a number of regions, domestically and offshore, will receive a copy of the request.

Targets for procurement from this RFP are as follows:

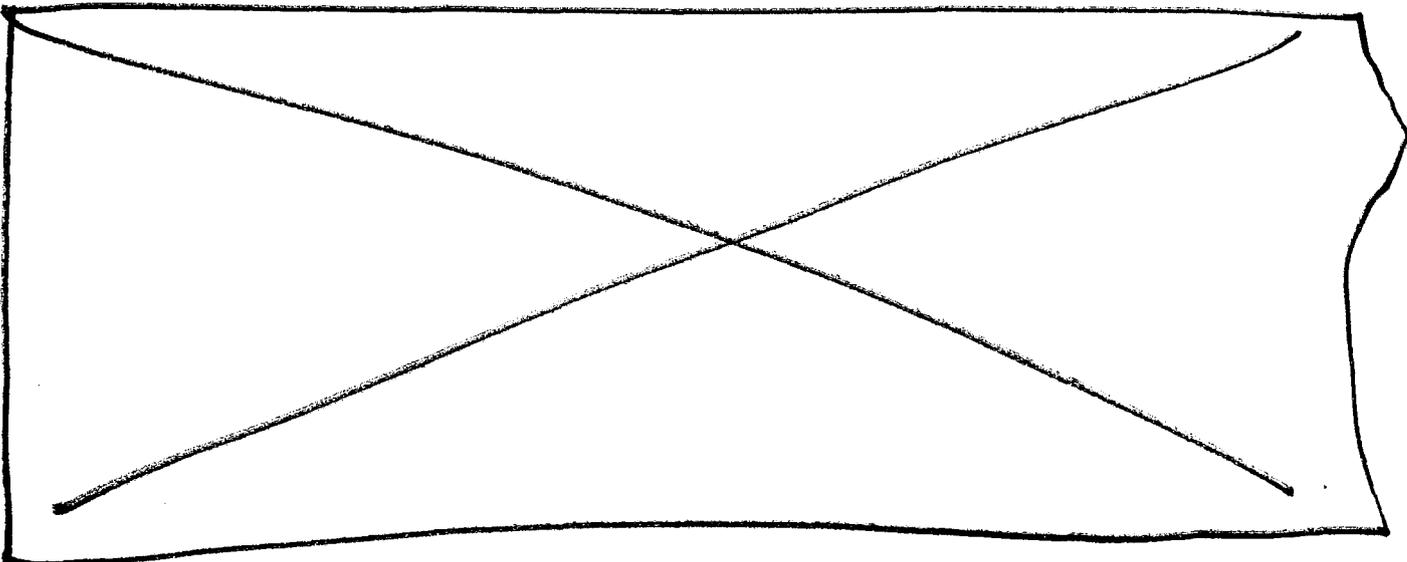


RFP RESPONSE SUMMARY

Twenty two suppliers responded to the RFP with approximately over one hundred unique responses.

RFP Analysis Assumptions and Methodologies

Transportation Assumptions



Results and Recommendations

Compliance Coal Strategy

- 1.
- 2.

[Redacted content for Compliance Coal Strategy]

NON-COMPLIANCE COAL STRATEGY

[Redacted content for Non-Compliance Coal Strategy]

RISK ASSESSMENT AND OTHER

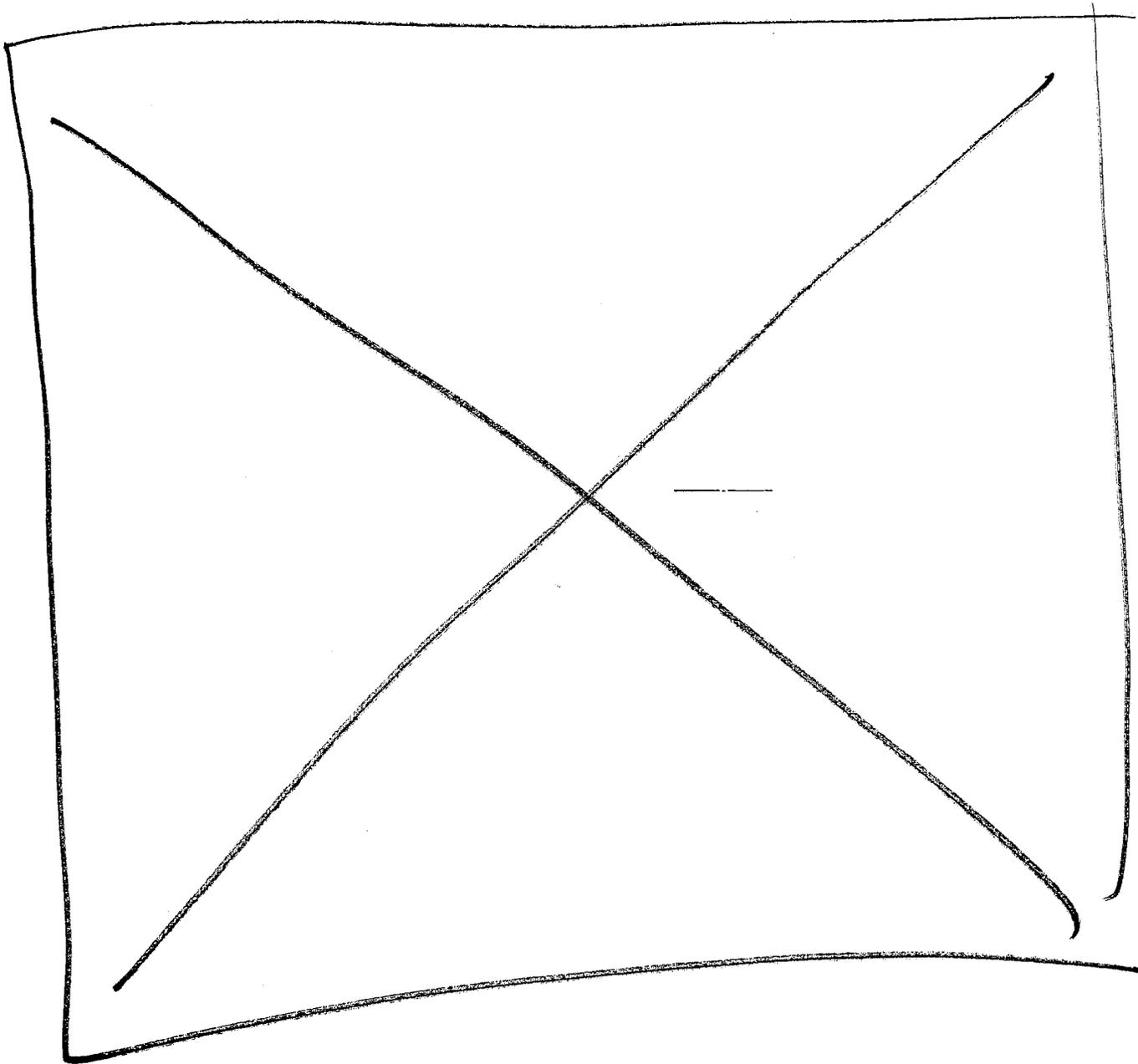
- 1.

[Redacted content for Risk Assessment and Other]

STRATEGY SUMMARY

[Redacted content for Strategy Summary]

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PORTIONS OF SAW-8

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Economic Factors

- PRB coal price undelivered ≈ [REDACTED] / ton
- PRB coal transportation costs:
[REDACTED] / ton
- FL [REDACTED] / ton



Economic Factors

2006 Evaluation	Crystal River 4
Desired PRB blend %	15% PRB
2006 Total Blended PRB Delivered Coal Cost	[REDACTED]
Savings Compared to <i>Spot Mkt</i>	[REDACTED]
Savings Compared to <i>Exist. 2006 Contracts</i>	[REDACTED]

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[REDACTED]

There is currently potential cost savings by burning a blend of PRB coal at CR4.

PORTIONS OF SAW-9



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Economic Analysis

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The modeling exercise assumed the following costs:

ASSUMPTIONS		
Coal Price (undelivered)	Transportation Costs	Capital Costs ⁽³⁾
⁽²⁾ PRB 8,800 coal ≈ [REDACTED] / ton. Compliance coal ≈ [REDACTED] / ton.	[REDACTED] Crystal River rail / barge costs ≈ [REDACTED] / ton ⁽¹⁰⁾ .	Capital investments to burn PRB (either blended or fully) will be unit specific. A fleetwide analysis has not been performed, but would be a future consideration if PRB investigation warrants. Therefore our evaluations in this report do not include any capital costs. <ul style="list-style-type: none"> No significant cost for ≤20% PRB blend assumed. Safety issues: [REDACTED] kW. Performance issues: [REDACTED] kW.

The financial evaluation below summarizes both delivered coal costs and effective annual costs. It can be seen that there are no significant cost savings to be obtained at [REDACTED] by burning a 20% blend of PRB coal compared to the baseline fuel.

Option: →	1	2	3	4
[REDACTED]	Baseline coal CAPP	80% CAPP / 20% PRB Pre-blended	80% CAPP / 20% PRB-Blended on site	100% PRB
Annual Delivered Coal Costs	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Effective Annual Costs	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Other Utilities

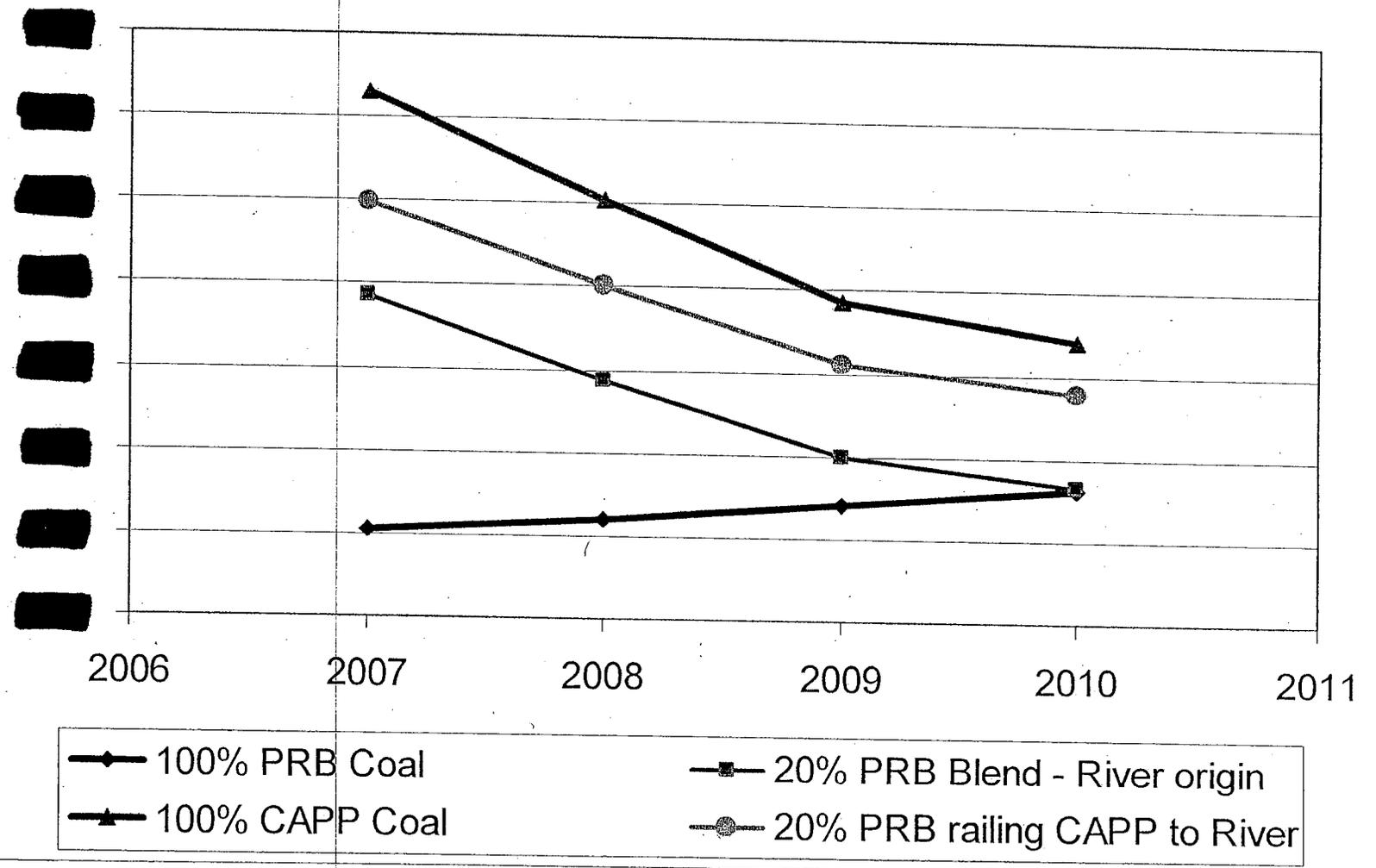
The following table summarizes some of the other utilities that are active in PRB use (this list is not intended to be fully comprehensive):

Burning PRB/CAPP Blends	Considering PRB blends	Converted Units to 100% PRB	Studied PRB use (using S&L)
<ul style="list-style-type: none"> Energy DTE Energy Sunflower Electric Atlantic City Electric TVA AEP First Energy 	<ul style="list-style-type: none"> Duke Energy Union Electric Company 	<ul style="list-style-type: none"> Alliant Energy Southern Co. Dominion Energy (from Illinois coal) 	<ul style="list-style-type: none"> Ameren Aquila Dairyland Power Dynegy Midwest Generation Great Plains Energy Midwest Generation NIPSCO Wisconsin Public Service

PORTIONS OF SAW-12

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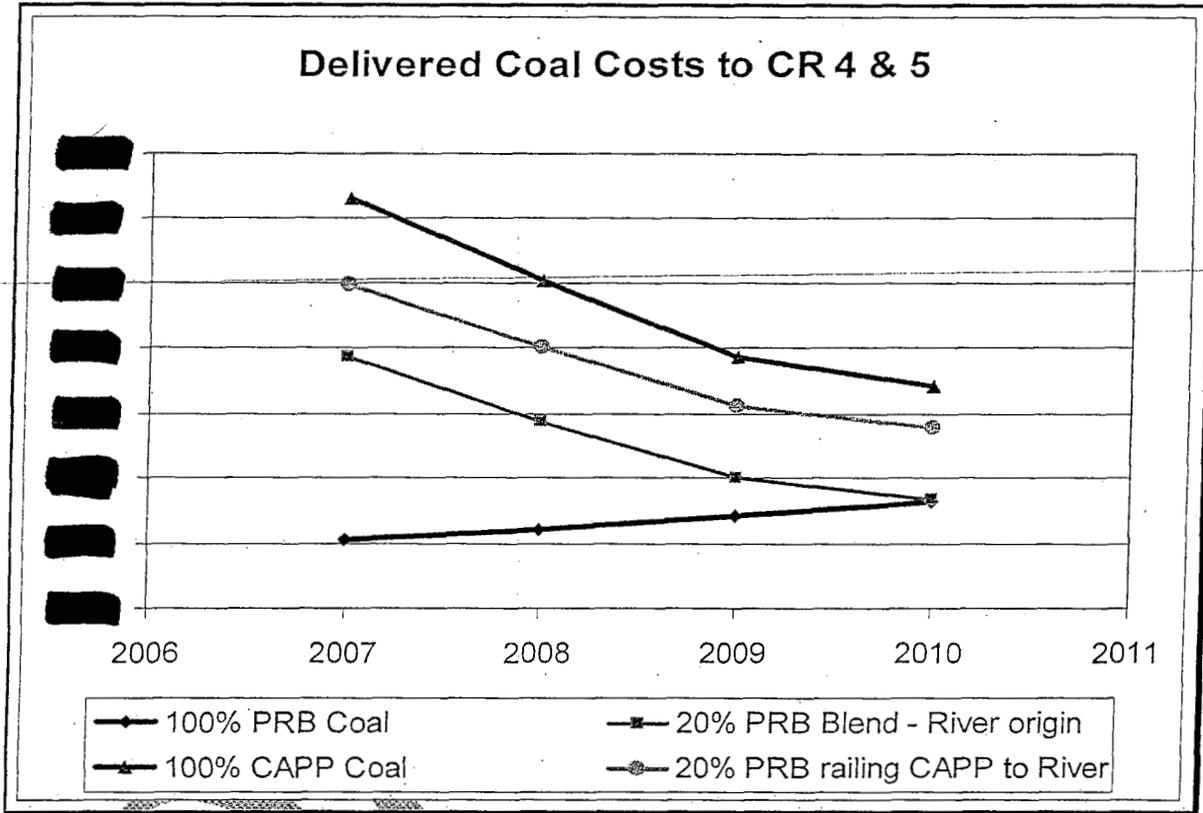
Delivered Coal Costs to CR 4 & 5



PORTIONS OF SAW-13

The projected cost convergence between CAPP and PRB is similar in Crystal River. However, Crystal River has one advantage [REDACTED]: access to PRB via barge. This could provide a substantial cost advantage if PRB is blended with Kanawha District CAPP coal at the International Marine Terminal (IMT). The preblended product is then shipped directly to Crystal River ready to use.

REDACTED (Non-Responsive)



Projected Cost Savings

The above costs and corresponding coal qualities were entered into the *Coal Financial Performance Model* for evaluation. This model allows for objective comparison of differing coals by evaluating them on the basis of heating content, emissions (NOx & SO₂), ash content and unburned carbon (LOI). The units were evaluated for years 2007-2010 and associated market values of NOx and SO₂ credits were used. NOx emission rates were assumed constant across the coals since we cannot be certain if PRB use would result in a NOx benefit at the units.

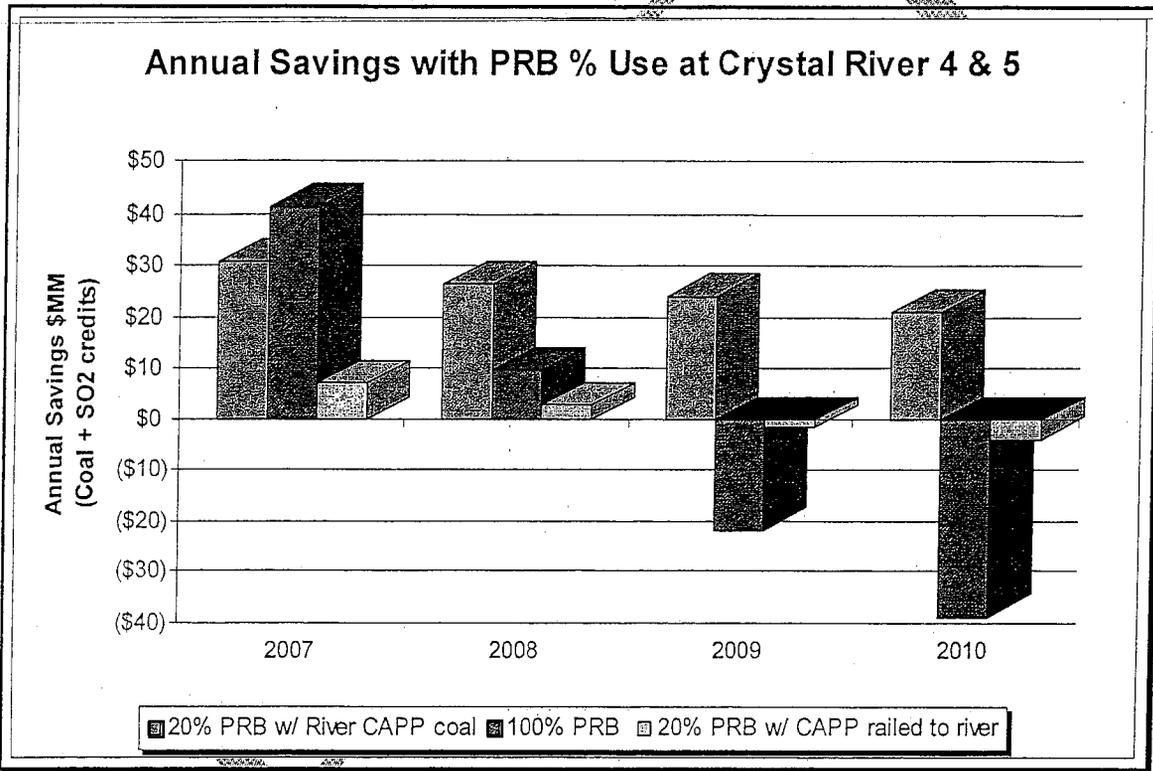
An example of the *Coal Financial Performance model* for Crystal River 4 in 2007 is shown on the following page.

REDACTED

Crystal River 4 & 5 Cost Savings

The following options were evaluated for Crystal River 4 & 5 units:

1. **100% PRB use** (conversion would be required)
2. **20% PRB Pre-Blend with local Kanawha district CAPP coal** (near the Ohio River)
3. **20% PRB Pre-Blend with CAPP coal *outside* Kanawha district** (____ ton higher than within Kanawha)
4. **20% PRB On-site blend** was evaluated but is not included in below graphs since slightly more expensive than Option 2 and would definitely need capital upgrades to handle pure PRB on-site prior to blending with CAPP.



Option 1: 100% PRB use

The findings of the financial evaluation echo the projected trends of declining CAPP and rising PRB prices. For example, the 100% conversion of Units 4 & 5 potentially offers \$41MM in potential 2007 savings, but savings sharply drop to \$9.7MM in 2008 and then go negative in 2009. CR barge unloading capacity limits them to 50% coal delivered by barge. Therefore in the 100% PRB scenario, 50% would be delivered via barge and the remaining half would be railed to the plant. Railing PRB to CR costs about ____ ton while the least expensive barge option for PRB is ____ ton. Therefore



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the transportation cost for 100% PRB is approximately [REDACTED] ton. This hurts the economic attractiveness of 100% PRB use.

Also, since unit conversions would be necessary to burn 100% PRB and a typical conversion time is 22 months⁴, it does not make logistical sense to attempt 100% conversion of CR 4 & 5 units at this time.

Supply risk would be another issue with 100% PRB use. The following is an excerpt from a recent Barron's Article:

*"An unusually wet spring led to two derailments in May [2005] on the only rail line coming out of the prolific southern Powder River Basin. Railroads initially thought the outage would be brief. But when significant problems with accumulated coal dust along 100 miles of track were discovered, they realized that they were facing an expensive bottleneck. You've basically got everyone [depending on PRB coal] going from hand to mouth," says a broker at Coal Network, who noted that utilities are now scrambling for fuel in the spot market. Result: The price of coal from the [Powder River] Basin for September delivery has risen 30% in the past month, to roughly \$11 a ton -- an unusually sharp move. A number of utilities have warned in the past three weeks that they've been forced to take measures to keep their stockpiles from sinking to dangerous levels."*⁵

For the reasons of not being able to achieve short or long term savings with 100% PRB use and the elevated risk of limiting our supply to a single region so far from our facility; conversion of CR 4 & 5 to 100% PRB is not feasible at this time.

Option 2: 20% PRB Pre-blend with local Kanawha district CAPP (in river area)

This is the strongest consistent candidate for savings. The advantage is that no rail is needed to get CAPP to the IMT facility. PRB is brought to the terminal where it is blended with CAPP and shipped via barge to CR. The blended product comes ready to coal up directly to units. With only 20% PRB, all blended coal can be delivered via barge which allows us to capture transportation savings. Current projections show combined savings of \$57MM for 2007-2008.

Also, industry accepts that most PRB blends under 30% can be accommodated without major safety concerns⁶. The S&L study due in September 2005 will provide high level estimates on proposed expenditures when using a blended PRB product (belt capacities, etc). Only 8-10% of the annual savings are attributable to SO2 credit sales; the remaining 90-92% of the savings is delivered fuel savings.

Option 3: 20% PRB Pre-blend with CAPP coal (railed to river)

Preblending with a CAPP coal (outside Kanawha district) also shows savings in 2007 (\$7.2MM) and 2008 (\$2.8MM), but like Option 1, goes negative beginning in 2009. This is attributed to high transportation costs and shrinking coal price differentials.

PORTIONS OF SAW-14

- Modify/upgrade the existing pulverizer steam mill inerting and water spray system as much as practical so that a functional system is available.

For both units the total estimated order of magnitude costs for these modifications is \$ [REDACTED] including engineering and contingency. Additional personnel will be required for housekeeping purposes primarily in the coal handling areas. The actual number of additional personnel required is dependent on the current operating practices of the owner. Due to the characteristics of PRB coal and its impact on equipment performance, equipment will need to be maintained in proper operating condition. Therefore, maintenance costs can be expected to increase.

It should be noted that coal blends with PRB coal less than 30% exhibit characteristics of bituminous coal and many of the safety modifications required for PRB coal are not necessary. However, above 30% PRB coal the blended coal acts like PRB coal. All the modifications required to maintain safety with PRB coal are required.

For coal blends with 70% PRB coal, the following modifications are recommended:

Performance

- Add four water cannons to each unit to clean the furnace water walls.
- Add/modify sootblowers to clean the convective pass heat transfer surface areas.
- Install new pulverizer for each unit, including motor drive, cascade conveyor, silo, feeder, coal piping, pyrites removal equipment, controls, burner piping, electrical feeds and auxiliary power modifications.
- Increase the skirt height for the cascade conveyors.
- Replace the existing 18 in. coal piping with 24 in. piping and modify the coal feeders.
- Replace all chutework at TP-3.
- Add crusher by-pass screens.
- Increase the capacity of conveyors 35A/B and 36A/B by installing 45 degree idlers.
- Increase the belt speed of the conveyors from the surge bin to the cascade conveyors and replace the drives and pulleys.
- Install belt scales on Conveyors 35A, 35B, 401, 403, 501 and 502.
- Replace chutework at TP-26 and TP-27.
- Replace the crusher vibratory feeders with belt feeders.
- Replace the surge bin vibratory feeders with belt feeders.
- Modify discharge chutes for Conveyors 501 and 502.

Safety

- Add washdown hoses and floor drains for the in-plant surge bin area and for the cascade conveyor rooms.
- Install sloping surfaces on beams for the in-plant surge bin area and the cascade conveyor room ceiling.
- Replace the existing four dust collectors with wet type dust collectors for silo ventilation.
- Add water sprays and residual effect dust suppression at the train unloading hopper.
- Add wind screen, water sprays and residual effect dust suppression at the barge unloading hopper.
- Add fogging dust suppression systems for all the transfer chutes in the reclaim system.

- Replace the existing non-functional pulverizer inerting system with a new steam inerting and water suppression system designed to current industry standards.
- Add CO monitoring system.
- Purchase a Fire Aid 2000 system to extinguish coal silo fires.
- Add explosion venting for the in-plant surge bin area and the cascade conveyor room area.

For both units the total estimated order of magnitude costs for these modifications is \$ [REDACTED] including engineering and contingency. Additional personnel will be required for housekeeping purposes primarily in the coal handling areas. The actual number of additional personnel required is dependent on the current operating practices of the owner. Due to the characteristics of PRB coal and its impact on equipment performance, equipment will need to be maintained in proper operating condition. Therefore, maintenance costs can be expected to increase. Variable O&M costs could increase by up to \$0.04/MWhr.

For burning 100% PRB coal, the following modifications are recommended:

Performance

- Add four water cannons to each unit to clean the furnace water walls.
- Add/modify sootblowers to clean the convective pass heat transfer surface areas.
- Modify burners and controls to handle a greater PRB coal flow and to optimize combustion to maintain low unburned carbon.
- Install cyclone separator dampers and a bypass duct for the gas recirculation system. Also, modify the fans for greater fly ash erosion resistance.
- Install new pulverizer for each unit, including motor drive, cascade conveyor, silo, feeder, coal piping, pyrites removal equipment, controls, burner piping, electrical feeds and auxiliary power modifications.
- Increase the skirt height for the cascade conveyors.
- Replace the existing 18 in. coal piping with 24 in. piping and modify the coal feeders.
- Replace all chutework at TP-3.
- Add crusher by-pass screens.
- Increase the capacity of conveyors 35A/B and 36A/B by installing 45 degree idlers.
- Increase the belt speed of the conveyors from the surge bin to the cascade conveyors and replace the drives and pulleys.
- Install belt scales on Conveyors 35A, 35B, 401, 403, 501 and 502.
- Replace chutework at TP-26 and TP-27.
- Replace the crusher vibratory feeders with belt feeders.
- Replace the surge bin vibratory feeders with belt feeders.
- Modify discharge chutes for Conveyors 501 and 502.

Safety

- Add washdown hoses and floor drains for the in-plant surge bin area and for the cascade conveyor rooms.
- Install sloping surfaces on beams for the in-plant surge bin area and the cascade conveyor room ceiling.
- Replace the existing four dust collectors with wet type dust collectors for silo ventilation.
- Add water sprays and residual effect dust suppression at the train unloading hopper.

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Progress Energy
Crystal River Units 4 & 5

October 14, 2005
Project No. 11888-001

Sergeant S. Lundy

- Add wind screen, water sprays and residual effect dust suppression at the barge unloading hopper.
- Add fogging dust suppression systems for all the transfer chutes in the reclaim system.
- Replace the existing non-functional pulverizer inerting system with a new steam inerting and water suppression system designed to current industry standards.
- Add CO monitoring system.
- Purchase a Fire Aid 2000 system to extinguish coal silo fires.
- Add explosion venting for the in-plant surge bin area and the cascade conveyor room area.

For both units the total estimated order of magnitude costs for these modifications is \$ [REDACTED] including engineering and contingency. Additional personnel will be required for housekeeping purposes primarily in the coal handling areas. The actual number of additional personnel required is dependent on the current operating practices of the owner. Due to the characteristics of PRB coal and its impact on equipment performance, equipment will need to be maintained in proper operating condition. Therefore, maintenance costs can be expected to increase. Variable O&M costs could increase by up to \$0.04/MWhr.

REDACTED

REDACTED

REDACTED

REDACTED

REDACTED

REDACTED

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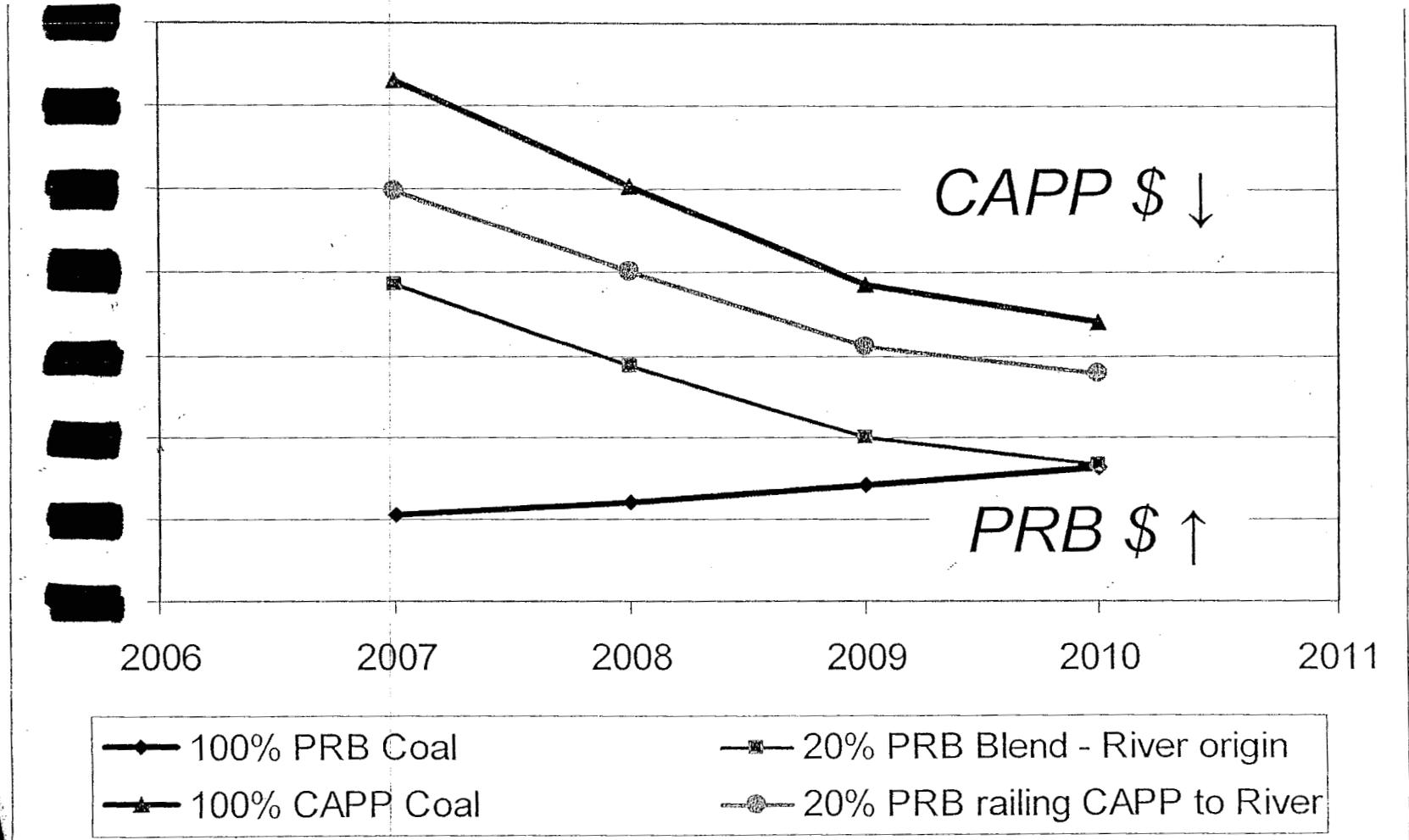
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PORTIONS OF SAW-15

CONFIDENTIAL

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Progress Energy Florida
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Predicted* Delivered Coal Costs to CR PRB & CAPP



*Prices are combination of Global Energy forecast (fob) +
RFD's transportation estimates



PORTIONS OF SAW-16

coordination costs needed for the trial. It also does not imply that we could continue to burn this PRB blend coal without some additional expenditures.

		Coal Financial Performance Evaluation		
		May 2006 PRB Blend Trial		
		COAL TYPE		
Parameter	Supplier Coal Type 2006	Normal CAPP Coal (Baseline - river CAPP) contract	18% PRB / 82% CAPP IMT Blend - Rail to River (weighted avg PRB & CAPP)	100% PRB Wyoming PRB - Generic Actual May trial cost
\$/ton (fob)				
Transp cost: Ohio River (\$/ton)				
IMT handling + Cross-Gulf Barging (\$/ton)				
Total Delivery Cost (\$/ton)				
Heating Value (BTU/lb), typical		12,500	11,771 (4.14)	8,585
% Sulfur, typical		0.71	0.66	0.24
% Ash, typical		10.3	11.0	6.1
% Total Moisture, typical		6.5	10.2	26.5
% Fixed Carbon, typical		52.94	49.14	27.94
\$/mmBTU (fuel only)				
\$/mmBTU (delivered cost)				
Coal Throughput				
Heat Input @ 100% - mmBTU's / Yr		50,430,000	50,430,000	50,430,000
Percent of annual fuel mix	0.742			
Resultant Heat Input for analysis		374,318	374,318	374,318
Coal Throughput Needed (Tons)		14,973	15,900	21,801
Additional Coal Tonnage due to BTUs			927	6,828
Equivalent Tonnage (includes LOI & BTU)		15,102	16,013	22,137
Total Delivered Coal Cost				
Coal Cost Compared to Baseline				

May 2006 Trial financial evaluation.

OPERATIONAL SPECIFICS

6. PRB Blend Specs – High-Moisture, Low Btu coal:

Coal	BTU/lb	% Ash	% Volatility	#SO ₂ /MMBtu	% Moisture
CAPP Coal (from 7 barges)	12,200- 12,800	9-14%	31-32%	1.08-1.17#	6-7%
PRB Coal (Avg. of 2 analyses)	8,585	6.7%	31.3%	0.97#	27.8%
As-received PRB blend (18% PRB & 82% CAPP)	11,771	10.96%	29.74%	1.12#	10.16%