BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Review of coal costs for Progress Energy Florida's Crystal River Units 4 and 5 for 2006 and 2007.	DOCKET NO. 070703-EI ORDER NO. PSC-09-0645-FOF-EI ISSUED: September 23, 2009

The following Commissioners participated in the disposition of this matter:

MATTHEW M. CARTER II, Chairman
LISA POLAK EDGAR
KATRINA J. McMURRIAN
NANCY ARGENZIANO
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APPEARANCES:

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FINAL ORDER REQUIRING PROGRESS ENERGY FLORIDA, INC. TO REFUND $7,698,907 TO RATEPAYERS

BY THE COMMISSION:

Background

In Docket No. 060658-EI, we considered a petition by the Office of Public Counsel (OPC) that asserted Progress Energy Florida, Inc. (PEF) was imprudent in its coal procurement for Crystal River Units 4 and 5 (CR4 and CR5) for the years 1996-2005. We did not consider evidence for any years subsequent to 2005. In that docket, we reviewed PEF's coal procurement activities for CR4 and CR5 for the period 1996 through 2005. In Order No. PSC-07-0816-FOF-EI (the Refund Order), issued October 10, 2007,[1] we found that PEF acted prudently in purchasing coal for these units from 1996 to 2001. Regarding the period 2001 through 2005, we stated:

> We find, however, that beginning in 2001, PEF did not act prudently in placing itself in a position to purchase PRB [Powder River Basin] coal for CR4 and CR5. During 2001 and 2002 PEF did not seek revisions to its environmental permit, it did not conduct PRB coal test burns, it did not modify its plant to burn PRB coal on a long-term basis, nor did it purchase PRB coal.[2] Despite the fact that PFC recognized in May 2001 that PRB coal was very competitive, on an evaluated basis, with the types of coal it had historically purchased (CAPP [Central Appalachian] coal and foreign coal) on behalf of PEF, prudent steps were not taken. We find that PEF management's failures to act despite its affiliate managements' knowledge that PRB coal was a cost-effective alternative was imprudent. We find that while PEF did not pay excessive fuel costs for the years 1996 through 2002, it did pay excessive fuel costs from 2003 through 2005.

(Refund Order, pp. 34-35) In the Refund Order, we found that in 2001 and 2002, PEF acted imprudently by failing to put itself in the position to use sub-bituminous coal, specifically PRB coal, which was known to be less expensive. As a result, PEF paid excessive fuel costs in 2003 through 2005. We found that it was imprudent for PEF not to purchase PRB coal when it was

[1] Docket No. 060658-EI, In re: Petition on behalf of Citizens of the state of Florida to require Progress Energy Florida, Inc. to refund customers $143 million.

[2] While PFC purchases coal on behalf of PEF, PEF management is fully responsible for the purchase decisions of PFC management. On page 4 of Order No. 21847, issued September 7, 1989 in Docket No. 860001, In re: Investigation into affiliated cost-plus fuel supply relationships of Florida Power Corporation., it states that the Commission will review and subject the activities of EFC (Electric Fuels Corporation, the predecessor to PFC) to the same scrutiny and standards that it would apply to FPC (Florida Power Corporation, the predecessor of PEF) if they had procured their own fuel.

cost-effective to do so in 2003 through 2005. Based on our finding of excessive fuel costs for 2003 to 2005, we ordered a refund. We further stated:

> The prudence of PEF's coal purchases of 2006 and 2007 was not considered in this proceeding. Accordingly, we direct PEF to supplement its 2006 Final True-Up Testimony in Docket No. 070001-EI to address whether the Company was prudent in its 2006 and 2007 coal purchases for CR4 and CR5.

(Refund Order, p. 36) We also directed PEF to supplement its 2006 Final True-up Testimony in Docket No. 070001-EI (the 2007 fuel docket) to address whether PEF was prudent in its 2006 and 2007 coal purchases for CR4 and CR5. Although the issue of PEF's 2006 and 2007 coal procurement was raised in the 2007 fuel docket, by Order of the Prehearing Officer, the issue was spun off into a separate docket.[3] Accordingly, this docket was opened. Subsequently, we required PEF to file testimony in this docket regarding the prudence of its coal purchases for 2006 and 2007.

PEF filed direct testimony claiming that its fuel procurement for 2006 and 2007 was prudent. PEF testified that the purchase of PRB coal was not as cost-effective in 2006 and 2007 as the coal purchases it actually made. PEF witness Weintraub stated that PEF purchased the most economical coal for 2006 and 2007. According to witness Weintraub, PEF blended high quality bituminous coal with lower quality bituminous coal and achieved lower prices than a CAPP/PRB blend. PEF witness Heller stated that an 80/20 CAPP/PRB blend would have been $3.1 million to $4.6 million more expensive than the CAPP and imported coals actually burned at CR4 and CR5 during 2006 and 2007. PEF does not believe it incurred excessive costs.

OPC filed testimony disputing PEF's assertions. OPC argued that PEF was imprudent in its coal purchases for CR4 and CR5 during 2006 and 2007. OPC witness Putman believed PEF could have purchased lower cost sub-bituminous coal to be burned in a blend with CAPP coal. Specifically, witness Putman recommended sub-bituminous coals based on bids from PEF's RFP Evaluations – Kennecott/Spring Creek coal for 2006. OPC asserted that in 2007 PEF should have purchased a much less expensive sub-bituminous coal from Indonesia. OPC believed PEF should refund $33.9 million to $35.6 million to customers. The Office of Attorney General (OAG) and Florida Industrial Power Users Group (FIPUG) agreed with OPC and filed briefs in support of OPC's positions in this docket.

PEF filed rebuttal testimony alleging that both coals suggested by OPC were rejected by PEF for cause, and offered testimony as to why it did not purchase the coal suggested by OPC. We conducted a hearing in this docket on April 13 and 14, 2009. We have jurisdiction pursuant to Chapter 366, Florida Statutes.

Based upon our evaluation discussed below, we find that PEF was prudent in not selecting Spring Creek Coal in 2006 and Indonesian Coal in 2007. We find, however, that the

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[3] Order No. PSC-07-0842-PCO-EI, issued October 17, 2007, in Docket No. 070001, In re: Order Granting Motion to Spin-Off 2006 and 2007 Coal Purchase Issue and Denying Request to Limit Parameters of Spin-Off Docket and Denying Motion to Stay.

imprudence in PEF's fuel procurement activities determined in Order No. PSC-07-0816-FOF-EI resulted in the costs of coal actually delivered to CR4 and CR5 during 2006 and 2007 being unreasonably high. PEF paid excessive costs for coal and SO2 allowances. Based on the following analysis, the total excess amount for 2006 and 2007 was $7,698,907.

Methodology for Determining Excessive Coal Costs

We assessed the reasonableness of coal costs for 2006 and 2007 using the methodology that we used in the Refund Order, with a modification to the capital cost component of the cost-effectiveness step. The Refund Order provided a two-step methodology to determine whether PEF should refund its customers for 2003-2005. The first step was a cost-effectiveness test. The cost-effectiveness test compared actual costs incurred during the year in question with the estimated cost of a coal blend consisting of 80 percent bituminous coal actually purchased and 20 percent sub-bituminous coal. The cost-effectiveness test included incremental capital costs as part of the equation. The second step of the methodology determined if PEF had paid excessive coal costs. We used the difference between actual delivered coal costs, including actual SO2 allowance costs, and the costs that PEF would have incurred had it used the coal blend to determine if PEF had paid excessive coal costs in 2003-2005.

While the parties disputed whether to apply the cost-effectiveness test with incremental capital costs, PEF witness Heller and OPC witness Putman agreed that the Refund Order methodology for calculating the excessive coal costs, if any, was the appropriate methodology for use in this case. The witnesses primarily disagreed over the inputs to use. A major disagreement between PEF and OPC witnesses was over the type of sub-bituminous coal to use in the coal blend. We address the type of coal to be input into the cost-effectiveness test below.

No party disputed the amount of coal costs PEF actually incurred during 2006 and 2007. Both PEF witness Heller and OPC witness Putman essentially agreed on the cost of coal actually delivered to CR4 and CR5 during 2006 and 2007.

In its brief, OPC argued that the calculation of incremental capital cost should be eliminated from the cost-effectiveness test. OPC contended that if PEF had made the capital improvements referred to in the prior docket, then those capital improvements would have been in service continuously beginning in 2003. OPC asserted that those costs would have been included in base rates and would have been incurred and recovered over time, whether or not PEF burned sub-bituminous coal.

While OPC argued to eliminate capital improvements from the equation for the cost-effectiveness test, PEF argued to modify how capital improvements are addressed in the cost-effectiveness test. PEF witness Heller recommended an adjustment to the amount used in the Refund Order. His adjustment would spread the revenue requirements associated with capital improvements over the fewer PRB Btus that would be used in a blend. This adjustment increased the capital cost amount from $0.03 per MMBtu to $0.12 per MMBtu. Witness Heller's proposed adjustment to the capital cost calculation reflects the impacts of a different coal heat content. Absent this adjustment, any change in the Btu content would unintentionally change the annual revenue requirements. As such, we agree with the adjustment.

Witness Heller also updated the accumulated depreciation and rate-of-return components of the capital cost calculator. We agree with these adjustments since they are updates to the inputs necessary to calculate capital costs. However, as noted below, the capital costs should reflect the specific heat content of the coal blend, i.e., the MMBtus per ton of the coal that makes up the 20 percent part of the blend.

Witness Heller presented his calculation of excessive coal costs with and without capital costs. The results of both PEF witness Heller's calculations indicated negative costs, so there would be no refund. OPC witness Putman disagreed with witness Heller regarding capital costs. He stated that, "the determinations by the Commission that the amount refunded in Docket No. 060658-EI should not be reduced by the amount of capital and operating costs, as those items would be recovered through base rates, renders Mr. Heller's discussion of capital costs moot."

We find that the two-step methodology is appropriate for 2006 and 2007, and that the cost-effectiveness test including incremental capital costs shall be applied to the coal purchased by PEF. The Refund Order used capital costs for the cost-effectiveness test, but not for the calculation of excessive coal costs passed through the fuel clause. We find that including capital costs is necessary and appropriate for determining cost-effectiveness. However, using the first step of the methodology, if the 80/20 coal blend is found to be cost-effective, any refund calculation shall exclude capital costs because these costs would not have been passed through the fuel clause. This is consistent with the Refund Order.

Accordingly, we find that the methodology established by the Refund Order is appropriate for measuring the cost-effectiveness of burning coal blends at CR4 and CR5. We will use the Refund Order methodology to determine if a coal blend would have been more cost-effective than what PEF actually burned at CR4 and CR5.

2006 Coal Purchases

PEF did not actually burn a blend with sub-bituminous coal during 2006 and 2007. In addition, the record does not contain a bid price for the specific amount of sub-bituminous coal that would have been used in an 80/20 blend. Therefore, it is necessary to develop a proxy or substitute sub-bituminous coal and price for use in the cost-effectiveness test and any calculation of excessive costs. For example, OPC and PEF offered different candidates for coal. The prices of those candidates are "proxy" prices. The prices are not actual prices that were paid for coal, but instead are substitutes used to calculate whether the coals would have been cost-effective. We must also establish a reasonable delivered price proxy which includes proxies for transportation costs and SO2 allowances.

The parties submitted different candidates for coal purchases in evaluating whether more economical coal was available for delivery to CR4 and CR5 during 2006. OPC witness Putman used one of several bids submitted by producers of PRB sub-bituminous coal in April 2004. OPC asserted that PEF's evaluation of the responses to its April 2004 RFP for coal for the years 2005, 2006, and 2007 should be used to evaluate whether the sub-bituminous coal was less costly. OPC stated that the six lowest bids were submitted by Kennecott, Arch, Triton, and Peabody. According to OPC, these were all bids to supply sub-bituminous coal. OPC selected

the lowest evaluated bidder (Spring Creek Coal bid by Kennecott) from the responses to PEF's April 2004 bid as OPC's primary candidate.

PEF disagreed with witness Putman's claim that Spring Creek coal was more economical. PEF asserted that its witnesses Weintraub and Stenger put on substantively unchallenged testimony showing that PEF could not have burned Spring Creek coal in the 2006 time frame. PEF argued that the Kennecott bids from the 2004 RFP were for a PRB coal from Spring Creek in Montana, a new coal that is different from the PRB coal we considered in Docket No. 060658-EI. PEF witness Stenger noted that Spring Creek coal is different from a typical PRB coal. She stated that Spring Creek coal is very high in sodium, which can cause slagging and fouling[4] and thereby affect boiler performance. She further stated that such impacts of high sodium cannot be blended away.

OPC witness Putman admitted he had no experience and very limited knowledge of the Spring Creek PRB coal. At the time of his deposition, he did not tie the Kennecott bid specifically to Spring Creek Coal. OPC witness Putman did not dispute that generating plants are generally designed to burn coal of a particular type or from a specific region, and they are also designed with specific fuel quality requirements such as heat content and chemistry. The witness commented that the CR4 and CR5 units were designed to burn a wide range of coals, including special design attention given to possible slagging and fouling issues. Witness Putman acknowledged a coal switch can be very expensive in terms of equipment and operating costs. Witness Putman agreed there is a need to do test burns when considering new coals. He also agreed that companies have to be careful about the potential for spontaneous combustion when dealing with sub-bituminous coals.

During cross-examination, OPC witness Putman agreed with PEF on some operational issues with Spring Creek coal and the need for testing and corrective actions. Witness Putman agreed that very expensive capital additions like baghouses[5] may be needed in order to burn sub-bituminous coals at plants with scrubbers. PEF witness Stenger stated the cost for a baghouse is estimated at $80 to $100 million. Witness Stenger also said there may be incremental capital additions up to $75 million as well as costs associated with engineering studies, testing, operating, and maintenance.

PEF's candidate was a 2006 actual purchase of sub-bituminous coal from the Powder River Basin. PEF asserted that based on the Refund Order, we should use the Wyoming PRB coal as the only candidate for alternative coal purchases for delivery to CR4 and CR5 during 2006 and 2007. PEF witness Heller based his proxy choice of PRB for the 2006 cost-effectiveness test on the Refund Order, which uses PRB coal. PEF argued that in Docket No. 060658-EI, we gave a clear set of instructions to PEF. PEF stated that because all the evidence regarding PRB coal ended in 2005, we opened this docket and instructed PEF to present evidence on the economics of an 80/20 blend of PRB coal for 2006 and 2007. PEF argued that had we wanted to open an analysis on the economics of every conceivable type of coal blend possible, we would have so ordered. PEF concluded that we limited our two-year review

[4] Slagging and fouling refers to deposits of ash fused to the boiler walls.
[5] Equipment to remove particulate matter and elements such as mercury.

extension to the blend of 20 percent Wyoming PRB and 80 percent CAPP coal, the coal we heard evidence on in Docket No. 060658-EI.

OPC contended that the Powder River Basin coal referred to in the Refund Order could come from either Wyoming or Montana. OPC also stated that the characteristics and specifications of coals are not necessarily functions of their geographical locations. According to OPC, what matters is whether the coal is suitable for use in CR4 and CR5. OPC asserted that when PEF issued its RFP, the specifications in the RFP were functions of properties, contents, and characteristics, not geographical origin.

The Refund Order and the record in this docket contain specific reference to coal with a heat content of 8,800 Btu/lb and an emissions rate of 0.80 pounds of SO2 per MMBtu. We agree with OPC that the Refund Order did not set a limit by region. However, the term "Wyoming PRB" is not based on a region, but rather the characteristics of the coal that is most typical of that region. We find that some PRB coals from Montana may be considered Wyoming PRB coals if they share these same characteristics. The Refund Order referred to the testimony of multiple expert witnesses who agreed that an 80/20 CAPP/PRB blend would perform adequately at CR4 and CR5. The Refund Order includes extensive information taken directly from the evaluations and assessments of operational issues and coal quality factors. Those evaluations and assessments were made by several technical experts and involved the PRB coal that was recognized and available in the 1996-2005 timeframe. OPC did not provide similar information that documents the expected performance of Spring Creek coal.

PEF has a process in place to evaluate new coals, and PEF witness Weintraub testified that the process does not automatically exclude specific types of coal. Based on the fact that those bids ranked high in PEF's short list after initial evaluation, PEF did not automatically exclude Spring Creek coals. However, because the Spring Creek coal was considered a new type of coal, PEF's evaluation of the cost impact involved more than just price comparison.

PEF's evaluation process for new coals appears to be consistent with witness Putman's testimony based on his own experience and his understanding of the Refund Order. Witness Putman agreed that before a company switches to a new coal, it should do test burns, evaluate operational issues, recheck economics and perhaps do a second test burn. His testimony commenting on the Refund Order recognized the time and costs required, such as testing and plant modification, to make sure a new coal is prudent to burn. OPC witness Putman acknowledged that even when a particular coal is cheap and available, it may not be prudent to burn.

OPC asserted that even if we disagreed that the Spring Creek Coal was an appropriate proxy for 2006, there were other sub-bituminous coals bid in the 2004 RFP besides the Kennecott/Spring Creek coal. OPC asserted that these other producers submitted bids that were more economical on an evaluated basis than the bituminous coal bids or the cost of the existing contract to which PEF turned for a portion of its 2006 coal. OPC asserted that the bid that ranked second in the April 2004 RFP was submitted by Triton North Rochelle. OPC concluded that since the Triton North Rochelle coal was the same coal PEF selected for the test burn that it began and aborted in 2004, it is an example of the typical PRB that PEF argued it could use.

PEF argued that the 2004 RFP evaluation cannot be used as a proxy price for PRB coal. PEF claimed that the use of the coal bid under the RFP for 2006 skips the year 2005 and assumed coal prices would have gone into effect in 2006 and 2007. PEF challenged witness Putman's choice of the lowest evaluated 2004 bid because it represented the price for one year of a three-year bid. PEF witness Weintraub estimated the price would have been five percent higher with a one year contract.

In response, OPC argued that witness Putman assumed the 2006 price would be the second year of the contract, not that the bid would have been left open for a year. PEF asserted that, even assuming the bid could be accepted a year later, the Triton North Rochelle bid, referenced in the 2004 Evaluation Sheet, was not cost-effective when compared to the actual costs of coal purchased by PEF.

Regarding the specific type of sub-bituminous coals at issue, OPC witness Putman said he relied solely on PEF's 2004 Evaluation Sheet, and witness Putman used prices from PEF's bid evaluations for his proxy coal prices. PEF witness Weintraub explained that the 2004 Evaluation Sheet used by witness Putman is a tabulation of 2004 bids to determine the short list of suppliers with which to begin negotiating contracts. According to PEF, it compared and ranked coal bids on spreadsheets that provide details on the types of coal offered, the cost of the coal, forecasted transportation costs to deliver the coal to CR4 and CR5, and forecasted emission prices. PEF asserted the bid ranking did not take into account capital upgrades, incremental transportation costs, and other considerations that were not yet known at the time bids were initially received and short listed. PEF concluded that simply looking at the 2004 bid evaluation to determine whether or not one coal purchase would be cost-effective was invalid.

We find PEF's arguments regarding the use of prices from the 2004 RFP Evaluation Sheet persuasive, to the extent that these prices do not represent actual costs that would have been incurred. PEF used the RFP evaluation prices to rank bids and develop a short list. PEF would then negotiate a contract with one of those suppliers. The eventual contract price may vary significantly from the bid price. The RFP evaluation includes estimated prices for transportation, SO2 allowances, and other costs that are subject to change. For example, subsequent to the 2004 RFP evaluation, PEF entered into new coal transportation contracts. In addition, the price quoted in a multi-year bid from an RFP evaluation could be different from the price for a one-year bid.

Based on the foregoing, we find that the RFP prices are inappropriate for determining if excessive costs were incurred. The PRB coals that OPC suggested, based upon the 2004 Evaluation Sheet, shall not be considered as candidates for the proxy coal for 2006. Furthermore, OPC did not persuade us that Spring Creek coal is the appropriate proxy. This coal is significantly different from typical PRB coal. The record reflects that Spring Creek coal could cause operational difficulties, and it would have to be the subject of test burns and engineering studies before it could be considered an appropriate proxy coal. Accordingly, Spring Creek coal shall not be considered a candidate to burn as a blend in 2006. We hold that the appropriate proxy coal for 2006 is PRB coal with a heat content of 8,800 Btu per pound and an emission rate of 0.80 pounds of SO2 per MMBtu. This is the standard, typical PRB coal that is offered in the market and it is the type of PRB coal used in the Refund Order.

2006 Coal Price Proxy

As noted above, PEF asserted that PRB coal is the appropriate choice. However, the coal PEF recommended had a heat content of 8,585 Btu per pound and an SO2 emission rate of 0.97 pounds per MMBtu. Witness Heller stated his choice of a PRB coal for 2006 was based on an actual PEF transaction – PEF's purchase of PRB coal for the May 2006 test burn.

In its brief, OPC disagreed with PEF witness Heller's use of the May 2006 test burn purchase of 3,300 tons to obtain his proxy price. OPC's witness Putman noted that the bid used by witness Heller was for a small quantity, 3,300 tons, and stated it was inappropriate for use as a proxy. Also, OPC asserted that the market prices for sub-bituminous coal increased between April 2004 when PEF received responses to its RFP, and 2006 when PEF made the spot market purchase of sub-bituminous coal.

We agree with OPC that witness Heller's 3,300 ton purchase of PRB coal should not be used as a proxy. Witness Heller's recommended PRB coal for 2006 had higher sulfur content and lower heat content than typical PRB coal. We find that this coupled with the small quantity for the May 2006 test burn purchase eliminate witness Heller's choice of PRB coal as an appropriate proxy coal for 2006. The quantity is very small and unrepresentative of the volume of PRB coal that PEF would have had to purchase.

A more accurate price candidate for 2006 is the average spot market price for PRB coal. The Refund Order noted that PEF had the ability to purchase the necessary tonnages of spot coal for 2003 through 2005 because PEF's actual spot purchases exceeded the necessary quantity of PRB coal. Thus, the Refund Order found spot prices to be reasonable. The use of the average spot market price for coal is consistent with the Refund Order. PEF could have purchased the necessary quantities of PRB coal at the average spot market price. Unlike the RFP evaluation prices, the spot market prices are based on actual transactions.

2006 Appropriate Tonnage

The methodology requires a determination of the tons of PRB coal that could have been used in an 80/20 CAPP/PRB blend. PEF witness Heller determined the quantities of blend coal for 2006 by using 20 percent of waterborne deliveries of compliance coals that, he believed, potentially could have been displaced by PRB coal.[6] In his direct testimony, witness Heller suggested that 490,000 tons of coal could have been displaced in 2006. However, in his rebuttal, PEF witness Heller revised his estimate to 440,600 tons of coal for 2006. This quantity is based on 20 percent of coal delivered to CR4 and CR5 via International Marine Terminal (IMT) during 2006. Witness Heller noted that PEF has blending capability only at IMT and United Bulk Terminals (UBT). He therefore excluded shipments of coal to CR4 and CR5 from the Alabama State Docks, where PEF does not have a contract for blending.

The Refund Order noted that the Sargent and Lundy report recommended that blending be done off-site, and that other studies assumed blending would be off-site. We stated that on-

[6] "Compliance coals" are low sulfur coals that produce emissions in compliance with the plant's air permit.

site blending could result in operational difficulties. Hence, the Refund Order methodology is based on the assumption that coal blending for the 80/20 blend would be done off-site. Consistent with the Refund Order, the methodology in this Order is based on the requirement that coal blending for the 80/20 blend would be done off-site.

For his quantities of coal for 2006, OPC witness Putman proposed 537,890 tons. He based this quantity on 20 percent of the total waterborne coal deliveries to CR4 and CR5 for 2006. In his amended testimony, OPC witness Putman breaks the quantity down by highest cost and second highest cost coal delivered to IMT. These amounts total 407,447 tons of coal for 2006. Witness Putman added an additional purchase to arrive at 537,890 tons for 2006.

The Refund Order allowed for rail transportation constraints in 2005 that caused some reduction in the quantity of PRB tons shipped. PEF witness Heller states these rail delivery constraints for PRB coal persisted into 2006. Pursuant to witness Heller's recommendation, we reduced the 2006 tons from witness Heller's rebuttal testimony (440,600) by 1.9 percent to recognize reduced rail shipments of PRB coal for the first quarter of 2006.

We find that the assumption regarding off-site blending shall continue for 2006 and 2007. Therefore, we agree with the tonnages from witness Heller's rebuttal testimony, adjusted for rail transportation constraints. We find that 432,229 tons are the appropriate tons for purposes of calculating excessive coal costs for 2006. This quantity will be less than 20 percent of the tons burned at CR4 and CR5. However, the off-site blending assumption is important given the record in Docket No. 060658-EI regarding operational problems with PRB coal.

2006 Transportation Price Proxy

The pricing methodology in the Refund Order is based on delivered coal costs, which requires adding transportation costs to the price of coal.[7] For 2006 transportation costs, PEF witness Heller used transportation costs associated with an actual purchase of PRB coal delivered to IMT in 2006 as a transportation cost proxy. PEF purchased 3,300 tons of PRB for an initial test burn, which was performed in 2006. The FERC Form 423 shows this coal was delivered to IMT at a price of $47.34 per ton. Therefore, witness Heller's proposed transportation costs for CR4 and CR5 was based on blending at and shipping from IMT.

The transportation elements of witness Heller's 2006 proxy were as follows:

- Blend the coal with CAPP or imported coal
- Transload the coal blend into an ocean barge
- Ship the coal blend to CR4 and CR5
- Include demurrage and other miscellaneous costs

[7] Delivered costs of coal include costs of transporting the coal to the plant.

To get the transportation costs of the blended coals he recommended, OPC witness Putman used transportation costs embedded in PEF's Evaluation Sheets. The transportation costs that PEF used for its Evaluation Sheets were forecasted prices. PEF witness Weintraub stated that the evaluations were used to develop a short list of suppliers, which became the starting point for negotiating a supply contract. He noted that actual transportation costs would have differed from the forecasted costs used for evaluating bids. In its brief, and in testimony, PEF claimed that if it were to purchase the Triton North Rochelle coal from the 2004 responses to RFPs, there would be additional costs associated with leasing or maintaining those rail cars. Witness Weintraub testified that the typical costs for leasing and maintaining those rail cars would be 2 cents per mill mile if the Triton North Rochelle coal was purchased. However, we are not persuaded that these additional costs are actual costs PEF would incur if it purchased Wyoming PRB coal at average spot price. As discussed below, witness Heller provided the rail cost for PRB coal in his direct testimony. PEF witness Heller's costs of shipping PRB coal are closer to actual costs for the transportation segments for PRB coal. Therefore, we find that witness Heller's transportation costs are a better transportation cost proxy for determining the delivered cost of PRB coal.

As noted above, witness Heller showed only the transportation costs from IMT for 2006. We find that an appropriate transportation cost proxy should include transportation costs from Wyoming as well. The record does not have specific 2006 transportation costs for railing PRB coal from Wyoming to Cora Dock, transloading it to river barges, or shipping by river barges. However, the record contains 2007 costs for these segments. The 2006 river barge rate presented by PEF witness Weintraub in his rebuttal testimony is not significantly different from the 2007 river barge rate used by witness Heller. Accordingly, we shall apply 2007 costs for these segments in 2006 as a reasonable transportation cost proxy.

2006 SO2 Emissions Proxy

For the 80/20 CAPP/PRB coal blend, the Refund Order used PRB coal with a heat content of 8,800 Btu/lb and an SO2 emission rate of 0.80 lb SO2 per MMBtu. This is the commonly available PRB coal. As such, it is a low sulfur coal. CAPP coal has relatively higher sulfur content and therefore causes PEF to incur higher SO2 allowance costs. The methodology in the Refund Order recognized the lower SO2 allowance costs associated with PRB coal and the resulting savings that would have occurred with an 80/20 CAPP/PRB blend.

The Refund Order set the SO2 emission allowance expense proxy amount using (1) the displaced CAPP/Foreign coal Btus, (2) market prices for SO2 allowances, (3) PRB coal heat content of 8,800 Btu per pound, (4) PRB SO2 emission rate of 0.80 pounds per million Btu and, (5) the SO2 emission rate of actual delivered CAPP/Foreign coals. The Refund Order set the proxy amount of PRB Btus based on displacing 20 percent (by weight) of the actual delivered waterborne bituminous coal for CR4 and CR5 adjusted for actual PRB coal transportation and production limitations or constraints.

The parties presented us with both forecasted and actual SO2 emission allowance prices. We conclude that actual prices are appropriate. For purposes of completeness, we also address

the other inputs necessary to calculate an SO2 emission allowance expense proxy of $750,720 for 2006.

PEF witness Heller calculated SO2 emission costs that would apply to PRB coal and included these costs in his "net operating cost penalty." Witness Heller noted that the baseline specification for CR4 and CR5 was an emission rate of 1.17 lbs. of SO2 per MMBtu. Witness Heller used forecasted prices, $977 per ton for 2006, to calculate SO2 emissions costs.

OPC witness Putman calculated excess SO2 emissions costs using the recommended tons of his recommended substitute coals and forecasted prices for SO2 emissions - $977 per ton of SO2 for 2006. When questioned regarding use of forecasted prices, witness Putman asserted that it would be retroactive ratemaking in his view to use actual costs.

In rebuttal testimony, witness Heller asserted that OPC witness Putman double counted SO2 emission allowance expenses. He explained that OPC used PEF's 2004 Evaluation Sheet coal price from Exhibits DJP-6 through DJP-8, which already included SO2 emission allowance prices, and in a separate calculation estimated the same expense, and then summed the two values. OPC witness Putman clarified that he was not certain what assumptions were included in PEF's evaluation of the bid coal prices. Thus, the record shows it is possible OPC witness Putman priced each ton of SO2 twice by adding in Exhibit 24 an additional price per ton of $977 for 2006.

In contrast to witnesses Heller and Putman, PEF rebuttal witness Weintraub supported use of actual average SO2 emission allowance prices of $731 per ton for 2006 rather than projected values. The forecasted prices of SO2 emission allowances are appropriate for evaluating types of coal but are outdated for calculating excessive costs. Actual prices of SO2 emissions allowances are the appropriate input for calculating excessive costs.

Our long-standing practice in cost-recovery clauses is to true-up projected cost-recovery amounts to the actual amounts that are prudently incurred. Additionally, no party appealed our decision in the Refund Order to use actual SO2 allowance market prices. Consequently, as a matter of policy, we will continue to rely on actual cost data, where available, in determining the total cost of the proxy coal for this docket for purposes of calculating any refund. Therefore, we rely on the rebuttal testimony of witness Weintraub and use market SO2 emission allowance prices of $731 for 2006.

In Attachment A, we include the market SO2 allowance prices and calculate the excess SO2 emission allowance cost of $750,720 associated with burning CAPP coal in comparison to an 80/20 PRB blend proxy for 2006.

2006 Refund Amount

We applied the methodology discussed above to the costs and conclude that PEF incurred excessive coal costs in 2006 amounting to $2,196,094. This amount consists of $1,445,374 based on the difference between the delivered prices of CAPP coal and PRB coal, and $750,720 based on the difference between the SO2 emissions costs of CAPP coal and PRB coal.

Attachment A contains the price and emissions calculations with supporting components. We explain the calculations below.

Witness Heller provided the average spot prices for PRB coal for 2006. The prices provided were for Wyoming PRB coal, with 8,800 Btu per pound and an SO2 emission rate of 0.80 pounds per MMBtu, and were quoted FOB mine. This is the same type of Wyoming PRB used by us in the Refund Order. This type of PRB coal is the standard, typical PRB coal that is offered in the market. The average spot price for 2006 for 8,800 Btu/lb PRB, with a 0.80 SO2 emissions rate, was $12.84 per ton. We used this price in calculating excessive coal cost for 2006. (Attachment A)

Attachment A contains information for our cost-effectiveness test as well as for our excess cost calculation using the average spot price. The cost-effectiveness test subtracts the evaluated[8] price of PRB coal, $3.24/MMBtu [Column (c), Table A], from the delivered price of CAPP coal, $3.30/MMBtu [Column (b), Table A]. The evaluated PRB coal price includes the additional capital and operating costs per MMBtu necessary for burning a blend of 20 percent PRB coal. The difference, $0.06 [Column (d), Table A], is the test result's price component. The positive difference in 2006 and the positive difference in pounds of SO2 per MMBtu in Column (d) of Table C indicate that the 80/20 blend was cost-effective.

Although the capital and operating costs per MMBtu are necessary for determining cost-effectiveness, fuel cost recovery amounts do not include those types of costs. Therefore, the refund calculation subtracts the delivered price of PRB coal from the delivered price of CAPP coal without including the capital component.

In summary, our refund calculation for 2006 uses 432,229 tons. The heat content of this proxy PRB coal is 17.6 MMBtus per ton (17.6 MMBtus per ton equates to 8,800 Btus per pound). Delivered price in $/MMBtu is the variable in the refund component. The two delivered prices are $3.30/MMBtu (CAPP) and $3.11/MMBtu (PRB). Our emissions-credit refund calculation uses an additional constant, $731/ton of SO2. Pounds of SO2 per MMBtu is the variable in the emissions-credit component. The SO2 emission rates for CAPP coal and the PRB proxy coal are 1.07 pounds per MMBtu and .8 pounds per MMBtu, respectively.

Based on the above calculation, the excessive coal cost refund amount for 2006, exclusive of excess costs related to SO2 emissions, is $1,445,374. (Attachment A, Table A, Column j) Our excess SO2 emissions costs are calculated to be $750,720. The total excess coal and SO2 emissions costs for 2006 are $2,196,094. (Attachment A) Based on the foregoing, we find that PEF incurred excessive coal costs of $2,196,094 for CR4 and CR5 in 2006.

2007 Coal Purchases

The parties submitted two candidates for us to consider in evaluating whether more economical coal was available for delivery to CR4 and CR5 during 2007. OPC submitted sub-

[8] For purposes of this calculation, we have used "evaluated" to mean delivered price including an allowance for capital additions needed to burn the blend.

bituminous coal from Indonesia. PEF submitted a Wyoming PRB based on a bid from its February 2006 RFP along with witness Heller's transportation costs.

OPC stated that when PEF solicited bids in 2006, two producers of Indonesian coal submitted offers. OPC claimed that PEF scored the Indonesian coal offers on the same evaluated basis as the other bids it received and ranked the bids as first and second. OPC witness Putman recommended we use a sub-bituminous coal from Indonesia for evaluating cost-effectiveness.

PEF argued that this Indonesian coal differed from the PRB coal that we considered in Docket No. 060658-EI. Therefore, PEF asserted that based on the Refund Order, we should use Wyoming PRB coal as the only candidate for alternative coal purchases for delivery to CR4 and CR5 during 2007. As discussed above, Wyoming PRB was the coal specified by the Refund Order. The PRB coal used in the Refund Order had a heat content of 8,800 Btu per pound and an emission rate of 0.80 pounds of SO2 per MMBtu.

PEF's ability to burn Wyoming PRB is not an issue here because the Refund Order specified it as a candidate to burn. However, PEF cannot ignore other coals just because they were not specified by the Refund Order. PEF has a process to evaluate new coals, and PEF witness Weintraub testified that the process does not automatically preclude specific types of coal. Based on the fact that those bids ranked high in PEF's short list after initial evaluation, we find that PEF did not automatically preclude Indonesian coals. However, because the Indonesian coal was considered a new type of coal, PEF's evaluation of the cost impact involved more than just price comparison.

As discussed above for the 2006 coal candidates, witness Putman agreed that new coals should be evaluated based on test burns, evaluation of operational issues, etc. Witness Putman noted that a coal switch can be very expensive in terms of equipment and operating costs, and fuel savings are compared with this hurdle over the long term, not just one year. He agreed that to burn Indonesian coal, which has extremely low sulfur content, some coal units may need new incremental capital additions such as a sulfur injection system.

Based on OPC witness Putman's review of PEF's 2006 RFP Evaluation Sheet, OPC and the intervenors argued that Indonesian coal had the lowest delivered cost for 2007. Witness Putman admitted that he focused solely on price comparison. However, he agreed that the projections in the 2006 RFP Evaluation Sheet were based on a set of circumstances that may differ from what ultimately occurs, and he did not dispute a supplier may place a bid and then find a better deal elsewhere.

PEF countered that an RFP evaluation is not the only decision point for the 2007 delivery and that PEF's process considers price as well as non-price factors that effect total cost. The PEF witness accused OPC witness Putman of making incorrect assumptions, and asserted that after adjusting the penalty impact for underutilization provisions in PEF's barge contract, double-counting of SO2 allowance costs, and other incorrect assumptions, the actual costs of Indonesian coals would be significantly higher.

PEF stated that Indonesian coal may not have been available to purchase for 2007. According to PEF witness Weintraub, the prospective Indonesian supplier became unresponsive regarding its 2006 bid.

OPC believed that such a decline in interest, if it existed, would not have meant that PT Adaro would not have signed a contract. OPC explained that a respondent to an RFP who was found to have submitted a bid without having coal to sell would see its reputation damaged in the industry. OPC concluded that it is highly unlikely that PT Adaro would have risked its reputation by submitting anything other than a real bid. OPC asserted that PT Adaro was a substantial player in the international market. OPC also opined that PT Adaro may have concluded that PEF was not a serious buyer at the time of PT Adaro's bid.

OPC witness Putman testified that while Indonesia's primary markets are India and parts of Asia, they do offer coal to other markets when additional opportunity presents itself. OPC gave the example that Tampa Electric Company purchased Indonesian coal from PT Adaro in commercial quantities for several years in the 1990s. Witness Putman agreed with PEF that the Indonesian coal suppliers may have sold the coal they had offered to PEF elsewhere. Regarding the coal supply reliability issue, witness Putman agreed that Asia is a better place for Indonesia to sell its coal; only occasionally is there a competitive advantage to bringing it to the United States.

We find that Indonesian coal is not an appropriate proxy coal for 2007. Prices from an RFP evaluation do not reflect what actual cost would have been. We find that Indonesian coal, while a sub-bituminous coal, is different from typical PRB coal. As demonstrated by PEF, a new coal with new characteristics would require testing. PEF would not have been able to test Indonesian coal, based on the price signal it received from the 2006 RFP, so that it could have been burned during 2007. Further, the record is inconclusive regarding whether Indonesian coal would have been available for PEF to purchase in 2007.

2007 Coal Price Proxy

For his 2007 proxy coal price, PEF witness Heller used the "least costly" bid price of $10.75 a ton, which is based on the Louis Dreyfuss bid with a two-year term from PEF's February 2006 RFP. The heat content of this coal was 8,200 Btu per pound and the SO2 emission rate was 1.2 pounds per MMBtu. Witness Heller stated that his 2007 PRB coal proxy price is below the 2007 index price. We disagree with witness Heller's proxy coal choice because, as noted above, prices from bid responses are used to rank bids and are the beginning point for negotiating a contract price. A bid price is not the final price but is a stepping off point for negotiations between the bidder and the potential purchaser.

We further disagree with witness Heller's proxy 2007 PRB coal because it has high sulfur content for PRB coal – 1.2 pounds of SO2 per MMBtu. PRB coal is typically low in sulfur content. The proxy coal that we find appropriate has an SO2 emission rate of 0.80 pounds per MMBtu. This is the typical, low sulfur PRB coal.

Based on the foregoing, the appropriate proxy coal for 2007 is PRB coal with a heat content of 8,800 Btu per pound and an emission rate of 0.80 pounds of SO2 per MMBtu. This is the standard, typical PRB coal that is offered in the market and it is the type of PRB coal used in the Refund Order.

As discussed above for the 2006 coal candidate, we find that the average spot price for PRB coal is the most appropriate proxy. This spot price is based on actual market transactions. Using the average spot price for 8,800 Btu/lb PRB coal with 0.80 SO2 emissions rate is appropriate to be used here as it is a price that could be reasonably obtained by PEF for the necessary quantity needed for an 80/20 blend. In 2007, the average spot price for 8,800 Btu/lb PRB with 0.80 SO2 emissions rate was $9.65 per ton.

2007 Appropriate Tonnage

As discussed for the 2006 PRB proxy, the Refund Order assumed that coal blending would be done off-site. Therefore, we agree with the tonnages from witness Heller's rebuttal testimony and 462,200 tons is the appropriate tons for purposes of calculating excessive coal costs for 2007.

2007 Transportation Price Proxy

The Refund Order methodology is based on delivered costs, which requires adding transportation costs to the price of coal. PEF witness Heller developed transportation costs for 2007 for shipping PRB coal from origins in Wyoming to CR4 and CR5. Witness Heller used costs based on the necessary transportation segments as proxies for the costs of shipping PRB coal to CR4 and CR5. He obtained the specific costs from FERC Form 423 data, his own estimates, and material provided by PEF. The transportation segments included:

- Ship the coal by rail to Cora Dock near St. Louis, MO
- Transload the coal into a river barge
- Ship the coal to Davant, LA or to International Marine Terminal (IMT) near New Orleans, LA
- Blend the coal with CAPP or imported coal
- Transload the coal blend into an ocean barge
- Ship the coal blend to CR4 and CR5
- Include demurrage and other miscellaneous costs

As addressed when discussing the 2006 proxy, PEF witness Heller's transportation calculations are an appropriate proxy in determining the delivered cost of PRB coal. These calculations are closer to actual transportation costs for transportation segments for PRB coal

than that of OPC witness Putman's transportation costs which were embedded in PEF's Evaluation Sheets.

2007 SO2 Emissions Proxy

For the same reasons discussed in this Order regarding the 2006 candidates for coal, the appropriate proxy coal for the 80/20 blend is PRB coal with a heat content of 8,800 Btu per pound and an SO2 emission rate of 0.80 pounds SO2 per MMBtu. The calculation of the excess SO2 allowance costs is the same as discussed for 2006. We used the recommended tons of PRB coal for 2007 and the actual 2007 market price of $524 per ton for SO2 emission allowances. The excess SO2 allowance costs for 2007 is $703,328.

2007 Refund Amount

We applied the methodology to the costs and conclude that PEF incurred excessive coal costs of $5,502,813 in 2007. This amount consists of $4,799,485 based on the difference between the delivered prices of CAPP coal and PRB coal, and $703,328 based on the difference between SO2 emissions allowances of CAPP coal and PRB coal. Attachment A contains the price and emissions calculations with supporting components. We explain the calculations below.

In summary, our refund calculation for 2007 uses 462,200 tons, as noted above. The heat content of this proxy PRB coal is 17.6 MMBtus per ton (17.6 MMBtus per ton equates to 8,800 Btus per pound). Delivered price in $/MMBtu is the variable in the refund component. The two delivered prices are $3.47/MMBtu (CAPP) and $2.88/MMBtu (PRB). Our emissions-credit refund calculation uses an additional constant, $524/ton of SO2. Pounds of SO2 per MMBtu is the variable in the emissions credit component. The SO2 emission rates for CAPP coal and the PRB proxy coal are 1.13 pounds per MMBtu and .8 pounds per MMBtu, respectively.

Based on the above calculation, the excessive coal cost refund amount for 2007, exclusive of excess costs related to SO2 emissions, is $4,799,485. (Attachment A, Table A, Column j) Excess SO2 emissions costs are calculated to be $703,328. The total excess coal and SO2 emissions costs for 2007 are $5,502,813. (Attachment A) Based on the foregoing, we find that PEF incurred excessive coal costs of $5,502,813 for CR4 and CR5 in 2007.

Total Refund for 2006 and 2007

Since we find the costs of coal delivered to CR4 and CR5 during 2006 and 2007 were unreasonably high, we require PEF to issue a refund to its customers. The amount of the refund is $7,698,907. We direct that PEF apply the refund amount, plus interest, during the 2009 fuel proceeding. This approach affects customer bills in 2010 and does not require administrative filings to implement. In reaching our decision, we considered three principal options for implementing a refund: (1) issue a one-time credit, (2) refund the amount over the remaining months of 2009, or (3) incorporate the refund amount in the 2009 fuel hearing to be reflected in customer bills in 2010. Previously, in the Refund Order, we ordered a refund that was incorporated into the fuel hearing to be reflected in customer bills in the following year (option

3). Treatment in the 2010 fuel factor has the advantages of administrative simplicity, rate stability, and grants refunds to customers shortly after our decision. The excess cost amounts are based on total system costs. Therefore, for purposes of a refund, the excess cost amount is a system number and shall be jurisdictionalized in the fuel proceeding.

Reporting Requirements

PEF obtained a permit to burn PRB coal and other sub-bituminous coal in May 2007. Since then, PEF has not conducted a test burn of any sub-bituminous coals.

OPC witness Putman stated that PEF's Crystal River plants can burn a variety of coals and that the facility is in a good location for obtaining coal from all over the world. He stated that PEF's fuel procurement activities have not been energetic and proactive in taking advantages of the location of CR4 and CR5 to lower fuel costs. According to witness Putman, fuel procurement practices should attempt to establish competition among supply basins and transportation modes. He noted that new barge unloading capacity at Crystal River would lower fuel costs, and he suggested that PEF has been slow in installing new barge unloading capacity. He further suggested that PEF could have applied to DEP to burn a sub-bituminous coal blend greater than 20 percent, but PEF has not conducted a test burn for such blends. Witness Putman indicated that installing scrubbers at CR4 and CR5 will enhance, and not detract from, PEF's fuel flexibility with these units.

PEF witness Stenger noted that the evaluation of opportunity coals takes time and involves predictive modeling, planning for test burns, and conducting test burns of various lengths. The timeline for test burns involves permitting and engineering studies.

Witness Stenger noted that PEF has a fuel flexibility program. The program is exploring burning different types of coal at CR4 and CR5. Witness Stenger indicated that high sulfur Illinois Basin coal that could be used after PEF installs scrubbers and other environmental equipment at CR4 and CR5. The scrubbers are expected to become operational during 2010. Prospectively, PEF believes that blends with high sulfur Illinois Basin coal will be significantly more economical than blends with sub-bituminous coals. However, PEF stated that it will resume testing blends with sub-bituminous coals if such blends would be economical on a sustained basis.

The Refund Order stated that PEF had not sought the appropriate revisions to its environmental permit, had not conducted test burns of PRB coal, had not modified CR4 and CR5 to burn PRB coal on a long-term basis, and had not purchased PRB coal. Since the issuance of the Refund Order, as noted above, PEF has obtained the appropriate environmental permitting for burning an 80/20 CAPP/PRB blend. In addition, PEF conducted a May 2006 test burn of a blend with PRB coal and proceeded with a fuel flexibility program.

PEF has made capital improvements to CR4 and CR5 to allow for the option of burning different types of coal, including PRB coal. According to witness Stenger, PEF has made the following improvements to CR4 and CR5 to allow for burning sub-bituminous coal:

- Modifying the air permit
- Making soot blowers operational
- Installing a mill inerting system
- Funded the installation of fogging and misting in the cascade room
- Refurbishment of the conveyor

However, at the time of the hearing, PEF had not begun installation of dust suppression systems in the north and south coal yards, and PEF had not conducted a longer test burn with PRB coal.

In its brief, FIPUG argued that PEF should not be permitted to profit from its failure to improve CR4 and CR5. FIPUG's position holds that carrying costs should not be recovered until PEF has restored CR4 and CR5's capability to burn cost-effective coal. We find FIPUG's suggestion to be an issue more appropriately raised in a base rate proceeding rather than a spin-off of the fuel clause.

OPC argued in its brief that we should require PEF to take all actions necessary to ensure that it can utilize the fuel flexibility customers paid for. In its position statement, OPC argued that PEF should be directed to conduct a test burn of blends to ascertain the highest percentage of sub-bituminous coal that can be blended. Once the test has been conducted, PEF should be required to amend its Federal Air Permit.

We find that the appropriate policy requirement is that PEF shall utilize the full capability and flexibility of CR4 and CR5 in a way that results in the lowest costs consistent with safety and reliability. To achieve this, we direct PEF to file a report as part of its projection testimony due on September 1, 2009, in Docket No. 090001-EI.

This report shall specifically address full compliance with the Refund Order regarding plant modifications and shall include proposed timelines and any other efforts such as test burns of coals from various supply basins having variant content or characteristics, which may create opportunities and allow PEF to achieve lowest cost fuels. PEF shall include summary information on the current status of modifications and any remaining issues that were recognized in the Refund Order. This information shall begin with the modifications PEF has done and comprehensively explain what PEF currently plans to do, with justification and projected timelines included.

PEF shall demonstrate how its coal procurement activities are continually looking for short-term and long-term opportunities in the coal markets, including continually exploring coal markets and coal supply basins worldwide. The results of initial procurement activities shall flow into the evaluation activities that have been described by witness Stenger.

We were also presented with an argument regarding the inputs for the methodology used in the Refund Order and in this Order. The cost-effectiveness/refund methodology assumed that the blend coal, i.e., the 20 percent part of the blend, displaces the most expensive coal that was actually burned. PEF stated that this could introduce bias into the methodology because the most

expensive coal may not always be the coal that could have been displaced. However, both PEF witness Heller and OPC witness Putman applied the methodology in the same manner: the blended coal was assumed to displace the most expensive coal that was actually burned. We agree with PEF that this assumption may introduce bias to the methodology. Therefore, any future application of the methodology shall compare total actual costs for a period to the total costs that would have resulted from a particular blend, taking into account the coal that would have actually been displaced.

Based on the foregoing, we direct PEF to file a report as part of its projection testimony due on September 1, 2009, in the fuel docket, Docket No. 090001-EI. The report shall address the current status of plant modifications and any remaining issues that were recognized in the Refund Order. Further, the report shall address PEF's additional efforts, including test burns of new coals that create opportunities to achieve the lowest fuel costs. PEF shall demonstrate how its coal procurement activities are continually looking for short-term and long-term opportunities in the coal markets, including continually exploring coal markets and new coal supply worldwide. Any future application of the methodology shall compare total actual costs for a period to the total costs that would have resulted from a particular blend, taking into account the coal that would have actually been displaced.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the findings set forth in the body of this Order, and in Attachment A to this Order, are hereby approved. It is further

ORDERED that Progress Energy Florida, Inc. shall refund to its customers $7,698,907. It is further

ORDERED that the refund amount, plus interest, shall be applied during the 2009 fuel proceeding. For purposes of a refund, the excess cost amount is a system number and shall be jurisdictionalized in the fuel proceeding. It is further

ORDERED that Progress Energy Florida, Inc. file a report as part of its projection testimony in the fuel docket, Docket No. 090001-EI, and shall contain the information specified in the body of this Order. It is further

ORDERED that any future application of the methodology established in the Refund Order shall compare total actual costs for a period to the total costs that would have resulted from a particular blend, taking into account the coal that would have actually been displaced. It is further

ORDERED that upon expiration of the time for appeal, this docket shall be closed.

By ORDER of the Florida Public Service Commission this 23rd day of September, 2009.

ANN COLE
Commission Clerk

(SEAL)

LCB

NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Any party adversely affected by the Commission's final action in this matter may request: 1) reconsideration of the decision by filing a motion for reconsideration with the Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, within fifteen (15) days of the issuance of this order in the form prescribed by Rule 25-22.060, Florida Administrative Code; or 2) judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or the First District Court of Appeal in the case of a water and/or wastewater utility by filing a notice of appeal with the Office of Commission Clerk, and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days after the issuance of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.

Excess 2006-2007 Coal and SO2 Costs at CR4 and CR5 and Fuel Refund

A. Excess 2006-2007 Coal Costs at CR4 and CR5 and Fuel Refund
(exclusive of SO2 credit adjustment and interest adjustment)

a Year	b CAPP Delivered Price ($/MMBtu)	c PRB Adjusted Evaluated Price ($/MMBtu)	d Price Difference ($/MMBtu)	e PRB in Tons	f MMBtu	g Net Excess Costs	h PRB (Proxy) Delivered Price ($/MMBtu)	i Difference of CAPP and PRB Delivered Prices	j Coal Costs Refund (via Fuel Clause)
2006	3.30	3.24	0.06	432,229	7,607,230	$445,374	3.11	0.19	$1,445,374
2007	3.47	3.00	0.47	462,200	8,134,720	$3,799,485	2.88	0.59	$4,799,485
TOTAL EXCESS COAL COSTS, 2006-2007						**$4,244,860**			**$6,244,859**

b : Delivered price of CAPP coal per witnesses Putman and Heller. See EXH 9 and EXH 20.

c : EXH 13, $1 million annual revenue requirement divided by PRB MMBtus in column F plus the PRB coal costs in column H. Commission's adjustment to recognize estimated capital recovery requirement.

d : b - c

e : EXH 31 JNH-8 Column 1 + JNH 10

f : Column E tons x 2,000 lb/ton x .0088 MMBbtu/lb, equal to the MMBtus derived from PRB coal at 20% blend

g : d x f

h : EXH 8 JNH-2 offers the transportation prices for each year. The 2006 total of $41.87 is calculated using 2007 rail rate, rail to barge transloading and barge to deviant charges in conjunction with the transloading, blending, and other costs as well as the Gulf Barge Transport rate. $41.87 + $12.84 (FOB mine price for PRB) = $54.71/ton $54.71/17.6 = $3.11/MMBtu. For 2007, the transportation price is $40.98 + $9.65 = $50.63. $50.63/17.6 = $2.88/MMBtu.

i: (b - h)

j: i x f

B. Excess 2006-2007 Costs Related to SO2 Allowances at CR4 and CR5 and Fuel Refund

a Year	b Avg. Lbs SO2 per MMBtu (CAPP)	c Avg. Lbs SO2 per MMBtu (PRB Proxy)	d Increased SO2 (lbs per MMBtu)	e MMBtu	f Excess SO2 lbs.	g Excess SO2 tons	h SO2 Price ($/ton)	i Excess SO2 Cost
2006	1.07	0.80	0.27	7,607,230	2,053,952	1,026,976	731	$750,720
2007	1.13	0.80	0.33	8,134,720	2,684,458	1,342,229	524	$703,328
TOTAL EXCESS SO2 COSTS, 2006-2007								**$1,454,048**

b : EXH 24, Witness Putnam

c : the SO2 emission rate for PRB assumed in Order No. PSC-07-0816-FOF-EI.

d : b - c

e : Attachment A Page 1 of 2

f : (d x e)

g : (b x c)/2,000 lbs

h : The average market price of SO2 emission allowances for 2006 and 2007

i: (g - h)

C. Excess 2006-2007 Coal and SO2 Costs and Fuel Refund

a Year	b	c	d	e	f Coal Costs Refund (via fuel clause)	g Excess SO2 Cost	h Refund Total
2006					$1,445,374	$750,720	$2,196,094
2007					$4,799,485	$703,328	$5,502,813
TOTAL EXCESS COAL AND SO2 COSTS (ADJUSTED) AND FUEL REFUND							**$7,698,907**