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August 10, 2006

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COMMISSION
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Ms. Blanca S. Bayó, Director
Division of the Commission Clerk
Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0870

Re: Docket No. 060001-EI

Dear Ms. Bayo:

I enclose for filing and appropriate distribution the original and 15 copies of Citizens' Petition for Order Requiring Progress Energy Florida, Inc. to refund to customers $143 million, representing past excessively high fuel costs stemming from failure to utilize the most economical sources of coals for crystal river units 4 and 5.

I am also including a second copy of this letter, that I ask you to stamp and return for our files.

Thank you for your assistance.

Yours truly,

Joseph A. McGlothlin
Associate Public Counsel

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor	DOCKET NO. 060001-EI FILED: AUGUST 10, 2006

CITIZENS' PETITION FOR ORDER REQUIRING PROGRESS ENERGY FLORIDA, INC. TO REFUND TO CUSTOMERS $143 MILLION, REPRESENTING PAST EXCESSIVELY HIGH FUEL COSTS STEMMING FROM FAILURE TO UTILIZE THE MOST ECONOMICAL SOURCES OF COALS FOR CRYSTAL RIVER UNITS 4 AND 5

AND

PROPOSED PROCEDURE AND SCHEDULE

Pursuant to Section 350.0611(1), Florida Statutes, and Rule 28-106.201, Florida Administrative Code, the Citizens of the State of Florida, by and through the Office of Public Counsel, hereby petition the Commission to order Progress Energy Florida, Inc. ("PEF") to refund to customers the amount of approximately $143 million, representing excessive past fuel cost recovery charges and extra SO_2 allowance costs associated with PEF's failure to utilize the most economical sources of coals for ratepayers in its Crystal River Units 4 and 5 during the period 1996-2005. Despite the fact that PEF designed and constructed Crystal River Units 4 and 5 to be able to burn a blend of coals comprised 50% of sub-bituminous coal and 50% of bituminous coal—a design feature that PEF touted when it announced the units, and a capability for which customers have been paying through PEF's base rates—PEF failed to act to lower customers' costs by purchasing sub-bituminous coal during 1996-2005, when it became the most economical source of fuel for Crystal River Units 4 and 5. Indeed, at the same time that other

southeastern utilities were shifting to sub-bituminous coal to lower their costs, PEF effectively abandoned its authority to burn sub-bituminous coal under its environmental permits and initiated no effort to reacquire it until November 2005. As of today, sub-bituminous coal still has not been burned at Crystal River Units 4 and 5 on a commercial basis. As a result of PEF's failure to act prudently and in its customers' interests, during 1996-2005 PEF's customers paid fuel charges and costs of SO_2 allowances that were unreasonable and excessive by $143 million, which amount the Commission should order PEF to refund, with interest, to customers. In support of their Petition, Citizens state:

1. *The name of the affected agency* is the Florida Public Service Commission.

2. *Statement of when and how the petitioner received notice of the agency decision:* This aspect of Rule 28-106.201, Florida Administrative Code is inapplicable to the instant petition, in which the Citizens request the Commission to take specific action.

3. *The name, address, and telephone number of Petitioner and of Petitioner's representative:*

Harold McLean, Public Counsel
Joseph A. McGlothlin, Associate Public Counsel
Appearing on behalf of the Citizens of the State of Florida
Florida Office of Public Counsel
111 West Madison Street, Room 812
Tallahassee, Florida 32399-1400

4. *A statement of how and when the petitioner received notice of the agency decision:* This aspect of Rule 28-106.201, Florida Administrative Code is inapplicable to the instant Petition, through which Petitioner is requesting the Commission to take action.

5. *A statement of all issues of disputed fact:* Citizens assert the following facts in support of their request. Citizens are not in a position at this time to know whether and to what extent the facts alleged in the following paragraphs will be disputed by Progress Energy Florida, Inc. or other parties.

6. In the late 1970's PEF's predecessor, Florida Power Corporation, designed and planned Crystal River Units 4 and 5 as the next units in its generation mix. For the sake of simplicity, in the remainder of this Petition Citizens will refer to both Florida Power Corporation and Progress Energy Florida, Inc. as "PEF."

7. PEF purposely designed and sized all of the components (boilers, coal delivery and coal handling systems, pulverizers, electrostatic precipitator, etc.) of Crystal River Units 4 and 5 to have the ability, and the flexibility, to burn a blend of bituminous and sub-bituminous coals containing 50% sub-bituminous coal on a tonnage basis. In fact, Black and Veatch, the engineering firm that PEF engaged to design the units, specified a 50/50 blend of sub-bituminous Western and bituminous Eastern coals as the "design basis" of the units. Babcock and Wilcox, who fabricated the boilers, provided a performance guarantee for the boilers of Crystal River Units 4 and 5 that specifically contemplated the use of this "design basis" 50/50 blend of sub-bituminous and bituminous coals within the boilers. An excerpt from Babcock and Wilcox's description of the boilers, and of the fuel the boilers are designed to combust, is included in the Appendix to this Petition as Attachment A.

8. Pursuant to the requirements of the Florida Electrical Power Plant Siting Act, in 1977 PEF submitted an application for certification of Crystal River Units 4 and 5 by the Governor and Cabinet, sitting as the Florida Electrical Power Plant Siting Board

("Siting Board"). In support of its application, PEF emphasized its ability to fuel the units with a mixture of Western sub-bituminous and Appalachian bituminous coals. An excerpt from PEF's application for a certification order is included in the Appendix as Attachment B. In conjunction with its application, PEF sent a letter to the Florida Department of Environmental Regulation dated February 3, 1978, in which PEF told the agency, ". . . this is to advise you that low sulfur coal for Crystal River units 4 and 5 will be delivered to the Plant site by barge from the West and by unit train from the Appalachian area in approximately equal tonnages." The letter appears in the Appendix to this Petition as Attachment C.

9. The Siting Board granted PEF's application for certification, subject to certain conditions. The conditions of certification imposed by the Siting Board accommodate the utility's ability to burn a mixture of sub-bituminous and bituminous coals at Crystal River Units 4 and 5. Similarly, in 1978 the federal Environmental Protection Agency, acting pursuant to the Prevention of Significant Deterioration ("PSD") program, approved PEF's application for authority to construct the units, with terms that allowed PEF to pursue its planned blend of sub-bituminous and bituminous coals.

10. For PEF, an economic comparison of bituminous coal and Western sub-bituminous coal is affected by several factors. Within Crystal River Units 4 and 5 the utility essentially converts thermal energy stored within coal into electrical energy. PEF must obtain quantities of coal that, when combusted, will release the number of Btu's of heat energy sufficient to generate the requisite amount of electricity. The Btu content of a given quantity of sub-bituminous coal is lower than that of the same quantity of bituminous coal. This means that a utility must burn a greater amount of sub-bituminous

coal to obtain the same Btu's of heat that would be derived from a given quantity of bituminous coal. In other words, the price of coal "per million Btu's" is more meaningful to an analysis of the competing economics of the two coals than the price of coal "per ton." A utility must take this disparity in Btu content into account when it compares the costs of sub-bituminous and bituminous coals. Further, the overall economic analysis must take into account *delivered* costs as affected by costs of transportation. To ensure that it is securing the most economical sources of fuel for its customers, a prudent and well managed utility must monitor and respond to overall market conditions and other relevant considerations on an ongoing basis.

11. When PEF placed Crystal River Units 4 and 5 in commercial service in 1982 and 1984, respectively, the Wyoming Powder River Basin coal that was available in the market contained approximately 8,200 – 8,450 Btu's per pound of coal. By comparison, Appalachian bituminous coal contains approximately 12,500 Btu's per pound. In addition, at the time PEF placed Crystal River Units 4 and 5 into service, only one rail company served the Powder River Basin ("PRB") suppliers. The absence of competition resulted in high transportation costs for PRB coal by rail. As a consequence of the Btu and transportation "penalties," Powder River Basin coal generally was not an economic choice for southeastern utilities in the 1980's. OPC does not contend that unreasonable fuel costs resulted from PEF's decision to exclude PRB sub-bituminous coal from its supplies during the period 1982 - 1995.

12. However, by the early 1990's two significant developments had changed the relative economics of PRB sub-bituminous coal and Appalachian bituminous coal dramatically. First, huge deposits of sub-bituminous coal lying south of the original

Wyoming PRB mining activity were opened for development. Significantly, whereas most earlier Wyoming PRB sources contained only about 8,200 – 8,450 Btu's per pound of coal, the new Wyoming mines provided coal containing 8,800 Btu's or more per pound. This material increase in the heat content of available PRB sub-bituminous coal lessened the delivered Btu "penalty factor" associated with the economic comparison of PRB sub-bituminous and Appalachian bituminous coals. The second development was the construction of additional rail facilities into the PRB area and the advent in the mid – 1980's of a second rail service provider that led to 'rail-on-rail' price competition for the transportation of PRB coal.

13. With these developments in place, in the early 1990's PRB sub-bituminous coal became available to mid-western and southeastern utilities at delivered costs lower than the delivered costs of competing Eastern bituminous coal. Numerous utilities acted promptly to lower their fuel costs by shifting to PRB coal. The opportunities for substantial savings were so great that many utilities incurred significant capital costs to modify units that (unlike Crystal River Units 4 and 5) were not originally designed to burn PRB coal.

14. Utilities in Alabama, Georgia, and Florida were among those that began to procure and burn PRB sub-bituminous coal in the early-to-mid 1990's. Alabama Power shifted its Miller plant from Appalachian coal to PRB sub-bituminous coal in 1995. The quantities of PRB coal that Alabama Power burned at its Miller plant rose from 2.7 million tons in 1995, to 13.6 million tons in 1996 and 10 million tons in 1997. Georgia Power's Scherer Units 3 and 4 were not designed originally to burn PRB coal. In 1993 Georgia Power shifted Units 3 and 4 to 100% PRB coal. FPL now owns 75% of Scherer

Unit 4. PRB sub-bituminous coal fueled economical "coal-by-wire" electricity that for years Florida utilities have secured from generators located in Georgia. Gulf Power owns 50% of Plant Daniel, located in Mississippi. Plant Daniel has burned PRB sub-bituminous coal extensively since 1994.

15. In Florida, Tampa Electric Company shifted its Gannon coal-fired units to a blend containing PRB sub-bituminous coal in 1996. The addition of PRB sub-bituminous coal enabled Tampa Electric to lower both fuel costs and NOx emissions during the period 1996 – 2002. (To comply with a Consent Order entered in an environmental case, Tampa Electric closed the coal-fired Gannon units in 2004.)

16. Over time, PEF has looked to an affiliated company to act as PEF's fuel procurement arm. Prior to the merger of Florida Progress Corporation and CP&L Energy Inc., the entity was Electric Fuels Corporation. Since the merger, the entity responsible for procuring coal for PEF has been Progress Fuels Corporation. PEF and Progress Fuels Corporation are owned by parent Progress Energy, Inc. For ease of reference, in this Petition the name "Progress Fuels Corporation" will also refer to its pre-merger counterpart, Electric Fuels Corporation.

17. Prior to and during the period 1996-2005 Progress Fuels Corporation owned and/or controlled, through affiliated companies, docks, barges, and deposits of bituminous coal in the Appalachian region. Through contractual arrangements, Progress Fuels Corporation acted as the marketing agent for its affiliated companies.

18. Neither Progress Fuels Corporation nor its affiliated mining operations owned, mined, or marketed any sub-bituminous coal.

19. Frequently, Progress Fuels Corporation, as a marketer of coal in its own capacity and/or agent for its affiliated mining operations, has submitted bids to supply Appalachian bituminous coal to PEF in Requests For Proposals conducted and scored by Progress Fuels Corporation, in its capacity as the coal procurement arm of PEF. Over time Progress Fuels Corporation, with PEF's knowledge and consent, has awarded a significant portion of the coal supply needs of Crystal River Units 4 and 5 to Progress Fuels Corporation and/or its affiliates.

20. In 1995, a coal industry publication reported that PEF included sub-bituminous coal within the specifications of conforming coals when it issued a request for proposals for the supply of fuel to its Crystal River Units 4 and 5. However, even though the units were designed and constructed to accommodate a 50/50 blend of sub-bituminous and bituminous coals, PEF continued to burn bituminous coal exclusively in Crystal River Units 4 and 5.

21. In 1996, at a time when other utilities in the region were exploiting the economic advantages of sub-bituminous coal from the Powder River Basin, PEF was required by amendments to the federal Clean Air Act to submit an application for a "Title V air permit." The application form required PEF to identify the fuel(s) that PEF intended to combust in Crystal River Units 4 and 5. Notwithstanding the capability to burn sub-bituminous coal that PEF had built into the design parameters of Crystal River Units 4 and 5, the flexible fuel strategy that PEF had described to the Siting Board, and the changed economics of purchasing and transporting PRB sub-bituminous coal, in its 1996 application for a Title V air permit PEF identified only bituminous coal as the fuel

for Crystal River Units 4 and 5. The pertinent excerpt from PEF's 1996 application for a Title V permit is included in the Appendix as Attachment D.

22. During the late 1990's and continuing through 2006, the United States Congress promulgated a program under which entities that produced materials meeting the definition of "synfuel" earned tax credits of approximately $24 for each ton of qualifying synfuel they produced. Several PEF affiliates participated in the synfuel program, utilizing central Appalachian bituminous coal as their feedstock. The affiliates' process involved spraying bituminous coal with an oil-based substance at Ohio River and Kanawha River terminals.

23. In March 1999, PEF asked the Florida Department of Environmental Protection ("FDEP") to issue an "air construction permit" (required by state regulations before an emissions source is modified) authorizing PEF to burn a mixture of "bituminous coal and bituminous coal briquettes" in Crystal River Units 4 and 5. The term "bituminous coal briquettes" was intended to refer to the bituminous coal-derived product upon which PEF's affiliates based their participation in the synfuel tax credit program.[1] The FDEP granted PEF's application. An excerpt from FDEP's Public Notice of Intent to issue the permit is included in the Appendix as Attachment E.

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[1] Citizens are generally aware that Progress Energy entities' involvement with synfuel became controversial in other quarters. Here, Citizens describe the activities of the affiliates and their transactions with PEF solely for the purpose of showing their relationship to Citizens' petition for relief from unreasonably high fuel charges. Citizens express no view as to whether the materials produced by the affiliates and purchased by PEF conformed to the requirements of the synfuel program or other regulations.

24. Shortly before the FDEP issued this permit, by letter dated March 15, 1999, PEF requested FDEP to incorporate the same modification (that is, the addition of "bituminous coal briquettes" to the fuels for Crystal River Units 4 and 5) in PEF's Title V air permit. (Because of litigation over terms, PEF's 1996 application for a Title V air permit was still pending.) PEF's letter amendment was silent on the subject of adding sub-bituminous coal as a fuel for Crystal River Units 4 and 5. A copy of the letter from W. Jeffery Pardue of PEF to FDEP's Clair Fancy is contained within the Appendix as Attachment F.

25. When it issued PEF's Title V permit in 2000, the Florida Department of Environmental Protection limited PEF to the scope of its application, as it was amended by the letter of March 15, 1999; that is, with respect to the approved fuels for Crystal River Units 4 and 5, the permit restricted PEF to bituminous coal and a mixture of bituminous coal and bituminous coal briquettes—the only fuels for which PEF sought approval. The limiting language of PEF's final, original Title V permit is shown in Attachment G of the Appendix.

26. In 2004, PEF applied for its first renewal of the Title V permit. Again, in the section applicable to Crystal River Units 4 and 5 PEF omitted sub-bituminous coal from the application. When it issued the renewed permit the Florida Department of Environmental Protection again limited PEF to bituminous coal and a mixture of bituminous coal and bituminous coal briquettes. See Attachments H and I of the Appendix.

27. Affiliates of PEF produced their bituminous- based synfuel material, sold it to (among others) PEF, and claimed associated tax credits under the synfuel program. A

significant portion of the "synfuel" tax credits derived from "synfuel" that PEF affiliates sold to PEF to be burned in Crystal River Units 4 and 5. The tax credits inured to the benefit of PEF's affiliates and its parent corporation. The tax credits lowered Progress Energy, Inc.'s tax liability and increased its corporate earnings. The synfuel material traveled from Central Appalachia to the Crystal River site via PEF barge affiliates and via affiliate International Marine Terminal ("IMT"), a loading and transshipping facility in New Orleans. During the time frame in which PEF purchased this material from its affiliates, PRB sub-bituminous coal was available at delivered prices lower than the prices that PEF paid for either Appalachian bituminous coal or its affiliates' bituminous coal- derived "synfuel" material. If at the time PEF had purchased less expensive PRB sub-bituminous coal, it would have been routed through IMT's facilities or competitive facilities in New Orleans or Alabama. This less expensive PRB tonnage would have displaced PEF affiliates' synfuel and, relative to the costs that PEF actually incurred, lowered fuel costs charged to customers.

28. In 2004, on PEF's behalf Progress Fuels Corporation purchased a small quantity (26,200 tons) of PRB coal for the purpose of conducting a "test burn" of a blend of PRB sub-bituminous/bituminous coal at Crystal River Units 4 and 5. At the time the purchase was made, those involved in the transaction believed PEF had the requisite authority under its environmental permits to burn PRB coal at Crystal River Units 4 and 5.

29. In April 2004, the first barge shipment of a small quantity (26,200 tons) of PRB coal blended with bituminous coal and purchased for the limited "test burn" arrived at Crystal River from IMT. PEF began burning the mixture. After approximately 15,000

tons had been consumed, the department within PEF that is responsible for complying with requirements of environmental permits alerted the plant that PEF's federal Title V permit does not encompass the burning of sub-bituminous coal in Crystal River Units 4 and 5. PEF halted the burn and notified the Florida Department of Environmental Protection of the incident.

30. Also in 2004, in its capacity as fuel procurer for PEF, Progress Fuels Corporation issued a formal RFP in which it solicited proposals for the supply of coal to Crystal River Units 4 and 5 for 2005-2006. The qualifying coals specified in the RFP included sub-bituminous coal. Suppliers of qualifying sub-bituminous coal located in the Powder River Basin submitted bids in response to the RFP. At the time it issued the RFP relating to supplies of coal for 2005-2006, representatives of Progress Fuels Corporation believed PEF's permits authorized PEF to burn sub-bituminous coal in Crystal River Units 4 and 5. After it had issued the RFP, Progress Fuels learned that PEF's permit encompassed only bituminous coal. Progress Fuels proceeded to score all bids, including those of the PRB producers of sub-bituminous coal. On a fully evaluated, "delivered price" basis, the bids of the PRB sub-bituminous producers were materially lower than the bids received from either the central Appalachian producers or the South American producers to whom Progress Fuels Corporation awarded contracts.

31. In April of 2005, Michael Williams, Senior Vice President of PEF and Progress Energy Carolina, directed technical departments under his supervision to conduct a review of the potential for the use of blended sub-bituminous/bituminous coals at plants owned by the Progress Energy-affiliated utilities, including PEF. At the time,

river barge terminals owned by Progress Energy, Inc., affiliates were blending PRB coal and bituminous coals for other entities.

32. After receiving Mr. Williams' directive, PEF engaged the engineering firm of Sargent and Lundy to assess the ability of Crystal River Units 4 and 5 to accept and burn sub-bituminous coal. Representatives of Sargent and Lundy inspected the units in July of 2005. The Sargent and Lundy firm presented a report of its findings in September of 2005.

33. In its report, Sargent and Lundy verified that Crystal River Units 4 and 5 are, as they originally were designed and constructed to be, capable of receiving and combusting blends of PRB sub-bituminous and bituminous coals. In fact, in its report Sargent and Lundy estimated that PEF could burn a blend containing up to 70% PRB sub-bituminous coal before encountering the need to make the kind of extensive equipment modifications that would require major capital expenditures.

34. In conjunction with this review, PEF's strategic engineering department calculated that, by burning a blend of PRB and bituminous coals at Crystal River Units 4 and 5, PEF could lower its fuel costs significantly during the period 2007-2010. In making these estimates, PEF assumed a blend of coals containing a much lower ratio of the economical PRB sub-bituminous coal than the 50/50 blend that is the design basis for the units.

35. In May 2006 PEF conducted a test burn of a blend of sub-bituminous and bituminous coals in Crystal River Unit 5. The test burn was conducted with the knowledge and approval of the Florida Department of Environmental Protection. It

appears that PEF is pursuing a permanent modification to its Title V permit that will authorize it to burn sub-bituminous coal in Crystal River Units 4 and 5 in the future.

36. PEF's recent activities and appraisals confirm that Crystal River Units 4 and 5 are capable of burning a blend of PRB and bituminous coals. As long as the comparative economics favor PRB sub-bituminous coal, a prudent PEF should be positioned to lower the fuel costs borne by customers currently and in the future by incorporating the optimal amounts of PRB coal in its fuel portfolio. To the extent PEF fails to do so, the Commission should protect ratepayers through disallowances of any unreasonable and excessive costs in proceedings that relate to current and future operations.

37. However, the ability of Crystal River Units 4 and 5 to burn a blend of PRB/bituminous coals containing up to 50% PRB sub-bituminous coal was designed into the units' components in the 1970's and has resided in the units, dormant but viable, since the units were placed into service in the 1980's. Further, the developments that caused PRB sub-bituminous coal to become the most economical fuel choice for Crystal River Units 4 and 5 were in place by the early 1990's. Several southeastern utilities situated similarly to PEF made the adjustments in fuel supply called for by the developments that served to lower the costs borne by their customers. Through this Petition, Citizens seek the adjustments needed to address PEF's failure to utilize the blend of coals that Crystal River Units 4 and 5 were designed to burn when the blend became advantageous to ratepayers.

38. By no later than 1996, PEF should have begun burning a mixture of PRB sub-bituminous and bituminous coals at Crystal River Units 4 and 5. PEF should have

preserved and maintained its authority to burn sub-bituminous coal under its Title V permit. PEF should have increased the portion of PRB coal in the mixture expeditiously until it reached a 50/50 mixture– the units' "design basis" – of PRB sub-bituminous and bituminous coals at Crystal River Units 4 and 5. An examination of PEF's own description of the units' design, PEF's own initial fuel strategy, market prices for coals over time, and the availability and cost of transportation from the Powder River Basin region to PEF's Crystal River site demonstrate that such a shift was both feasible and economically desirable. Further, this information was known, or was available, to PEF at the time. PEF failed to avail itself of the most economical sources of coals to ratepayers. In 1996 PEF did not even identify sub-bituminous coal as a fuel for Units 4 and 5 in its application for a Title V air permit. From the ratepayers' perspective, this omission constituted an egregious failure of the utility to act in their interests. The omission buttresses the choice of 1996 as the appropriate beginning point for the calculation of the excess charges that followed.

39. By reviewing available data regarding the market price of PRB sub-bituminous coal over time and the cost of transporting the coal to Crystal River; comparing the delivered cost of PRB coal in dollars per million Btu's to the corresponding cost of bituminous coal in the same period; and substituting the cost of a 50/50 blend of the coals for that of the fuel that PEF actually burned, it is possible to calculate the extent to which PEF's fuel costs for Crystal River Units 4 and 5 were excessive as a result of PEF's failure to manage its coal costs properly. Citizens have placed within the Appendix to this Petition as Attachment J a matrix showing the results of calculations prepared by their expert consultant, Robert L. Sansom. The matrix

displays the annual savings during the period 1996-2005 that PEF could have and should have accomplished for its customers by maintaining its authority to burn sub-bituminous coal in Crystal River Units 4 and 5 and shifting timely to the blend of sub-bituminous and bituminous coals that the units were designed to burn. Significantly, the calculations underlying the matrix are premised on PEF's own original planning parameters and assumptions: a 50/50 blend of sub-bituminous and bituminous coals, supplied to both units. The calculations reflect PEF's capacity to blend the coals on site. However, the calculations also recognize that as a practical matter PEF would have needed to begin with less than 50% PRB and ramp up to the design standard over time. Beginning with the entry for 2000, the calculations also take into account the additional value that blending sub-bituminous coal would have provided in the form of SO_2 allowances having a monetary value in the market for such allowances created by amendments to the Clean Air Act. (PRB sub-bituminous coal produces approximately half the sulfur dioxide emissions of "low sulfur" Appalachian bituminous coal.) Because PEF failed to manage its coal costs properly, the fuel and SO_2 allowance costs borne by customers during the period 1996-2005 were excessive by the amount of $143 million, excluding interest. Attachment J reflects that during 2000-2005, the period in which PEF was purchasing "synfuel" from affiliates and blending it, rather than PRB coal, with Eastern bituminous coal, the excess costs totaled $116.7 million under the 50/50 design fuel assumption.

40. *Ultimate facts alleged*: PEF purposely chose a 50/50 blend of PRB sub-bituminous coal and bituminous coal as the design basis fuel for Crystal River Units 4 and 5. PEF's customers have bought and are paying for the costs of this design feature. The availability of higher Btu content PRB coal and competition for rail transportation of

PRB coal, developments which were known to the utility industry as of the early 1990's, rendered PRB sub-bituminous coal economically advantageous; yet PEF failed to avail itself timely of the design capability it had consciously built into Crystal River 4 and 5. PEF's failure to act in its customers' interests led to unreasonable fuel charges that were excessively high by the amount of $143 million during the period 1996-2005.

41. *Statement of Statutes and Orders Requiring Reversal of the Agency's Action.* This subpart of Rule 28-106.201 Florida Administrative Code is inapplicable to the instant Petition, as Citizens are requesting the Commission to take action. Citizens will address here briefly the Commission's legal authority and statutory responsibility to take the action that Citizens request.

42. Section 366.03, Florida Statutes requires all rates and charges made, demanded, or received by any public utility for any service rendered to be fair and reasonable. The fuel cost recovery charge assessed by PEF is a "rate" or "charge" within the meaning of Section 366.03, Florida Statutes.

43. Section 366.04, Florida Statutes confers on the Commission jurisdiction to regulate and supervise each public utility with respect to its rates and service. PEF is a public utility within the meaning of Section 366.04, Florida Statutes.

44. Section 366.05, Florida Statutes empowers the Commission to prescribe fair and reasonable rates and charges to be observed by public utilities subject to its jurisdiction.

45. A regulated utility is obligated to manage its operations prudently and to provide service to its customers at the lowest reasonable cost. These obligations extend

to and encompass the management of fuel procurement and the level of costs incurred in purchasing and combusting fuels during the generation of electricity.

46. If a utility incurs unnecessarily high fuel costs, the Commission must protect customers' interests by disallowing the excessive portion from the amount the utility wishes to recover from customers through the fuel cost recovery clause.

47. The Commission has the jurisdiction and the regulatory power to adjust the amounts it permits utilities to recover through the fuel cost recovery clause after it has allowed the utility to collect its requested fuel costs on a preliminary basis. In Order No. 12645, issued in Docket No. 830001-EU on November 3, 1983, the Commission emphasized that it will not determine prudence of fuel costs until it has all facts before it. The amounts the Commission allows the utilities to collect through the clause remain subject to refund in the event parties subsequently demonstrate, and the Commission finds, that the costs were incurred imprudently and/or were excessive in amount. In the case of *Gulf Power Company v. Florida Public Service Commission,* 487 So. 2d 1036 (Fla. 1986), the Florida Supreme Court affirmed an order in which the Commission adjusted the amounts that Gulf Power had flowed through the clause with the Commission's approval during a prior three year period—before the Commission subsequently determined, based upon a more complete factual record, that a portion of the costs were imprudent. The Court stated, "The fuel adjustment proceeding is a continuous proceeding and operates to a utility's benefit by eliminating regulatory lag. This authorization to collect fuel costs close to the time they are incurred should not be used to divest the commission of the jurisdiction and power to review the prudence of those costs." These legal principles are applicable to the situation described in this

Petition. The Commission has the requisite legal authority and, indeed the statutory responsibility, to take the action requested by this Petition.

PROPOSED PROCEDURE AND SCHEDULE

48. In November 2005, in Docket No. 050001-EO Citizens moved to defer the issue of whether the prices that PEF paid for coal to supply its Crystal River Units 4 and 5 during 2005-2006 were unreasonably high as a result of biased and/or inadequate 2004 market solicitations. In support of its motion Citizens demonstrated, through the affidavit of Robert L. Sansom, that PEF had not selected the most economical bids (for PRB sub-bituminous coal) submitted in response to its 2004 Request For Proposals. Citizens stated that more time was needed to conduct discovery sufficient to evaluate the situation. The Commission granted Citizens' motion.

49. In March 2006, PEF submitted testimony in which PEF claimed the fact that its Title V permit does not encompass sub-bituminous coal is a defense to the issue arising from the 2004 solicitation.

50. The documents that Citizens obtained from PEF through subsequent discovery made possible by the deferral reveal that the matters that were the subject of Dr. Sansom's 2005 affidavit and, indeed, of PEF's March 2006 testimony are but the tip of an iceberg of excessive coal costs stemming from PEF's failure to act prudently and in its customers' interests during the period 1996-2005. For instance: PEF has cited the restrictions within its environmental permit in 2004 as justification for not awarding contracts to PRB producers. However, as Citizens' Petition alleges, in fuller context PEF's failure to preserve and maintain authority to burn sub-bituminous coal in Crystal River Units 4 and 5 is part and parcel of the imprudence that led to unreasonable fuel

costs. Because the scope and breadth of the deferred issue has since expanded, through discovery, to encompass allegations of a decade of prejudicial fuel procurement activity/inactivity and more than $100 million in excessive costs, the Commission should establish a procedure for considering this Petition that will allow it to devote the time and attention to the subjects that customers' interests demand.

51. Logistically and practically, the merits of Citizen's Petition cannot be considered adequately during the November 2006 hearing in Docket No. 060001-EI. The existing schedule contemplates primarily an opportunity for Intervenors to respond to projections for 2007 and routine, limited true-ups. Citizens already have added to the agenda for the November 2006 hearing a proposal, supported by prefiled testimony, to modify the fundamental mechanism of the Generating Performance Incentive Factor (GPIF). Citizens have reason to believe its GPIF proposal will be controversial: one utility already has indicated its intent to oppose Citizens' proposal. In addition, during the environmental cost phase of the combined November 2006 hearing the Commission will be called on to review and evaluate utilities' plans for complying with the Clean Air Interstate Rule and the Clean Air Mercury Rule—proposals that would cost, in the aggregate, hundreds of millions of dollars over time. And while Citizens are prepared to present testimony supporting this Petition expeditiously, there is insufficient time to provide for responsive testimony from PEF and a meaningful opportunity by Citizens to evaluate and rebut such testimony prior to the scheduled November hearing.

52. Citizens submit that a schedule that will enable the parties and the Commission to coordinate the work associated with the matters already scheduled to be heard in November with the consideration of this Petition in a fair and orderly manner is

in the interest of parties and the Commission. Further, by interlacing the procedural milestones of the two tracks sequentially, a schedule can be developed that will accommodate the needs of both hearing processes in a reasonable amount of time. Currently, the utilities are to file testimony addressing projections in Docket no. 060001-EU on August 8, 2006, and Intervenors are to file responsive testimony on September 22, 2006. The utilities' rebuttal testimony is due on October 6, 2006. To this schedule has already been layered the deadlines for testimony addressing Citizens' GPIF modification proposal. The parties have agreed to a schedule that calls for the utilities to respond to Citizens' initial GPIF-related testimony on August 22, 2006; Citizens' rebuttal to that testimony would be due on September 22, 2006. The hearing is scheduled for November 6, 2006. With these milestones in mind, Citizens propose the following schedule for the processing of the instant Petition:

Citizens' direct testimony	October 18, 2006
PEF's responsive testimony	December 11, 2006
Citizens' Rebuttal	January 26, 2007
Hearing	Late February/Early March 2007

Statement of specific relief requested:

WHEREFORE, Citizens request the Commission to adopt the schedule for considering Citizens' Petition, and issues subsumed by the Petition, proposed herein; upon consideration, find that PEF's fuel cost recovery charges during the period 1996-

2005 were unreasonable and excessive as a result of PEF's imprudent and deficient management of the costs incurred to fuel Crystal River Units 4 and 5; and order PEF to return $143 million, plus interest, to its customers.

HAROLD MCLEAN, Public Counsel

Joseph A. McGlothlin

JOSEPH A. MCGLOTHLIN
Associate Public Counsel

DOCKET NO. 060001-EI
CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the Office of Public Counsel's Notice of Service of their Citizens' Petition for Order Requiring Progress Energy Florida, Inc. to refund to customers $143 million, representing past excessively high fuel costs stemming from failure to utilize the most economical sources of coals for Crystal River Units 4 and 5 has been furnished by electronic mail and U.S. Mail on this 10th day of August, 2006, to the following:

James Beasley
Lee Willis
Ausley Law Firm
P.O. Box 391
Tallahassee, FL 32302

Bill Walker
Florida Power & Light Co.
215 S. Monroe St., Suite 810
Tallahassee, FL 32301-1859

Paul Lewis
Progress Energy Florida, Inc.
106 E. College Ave., Suite 800
Tallahassee, FL 32301-7740

Tim Perry
McWhirter Law Firm
117 South Gadsden St.
Tallahassee FL 32301

John T. Butler, P.A.
Florida Power & Light Company
9250 West Flagler Street
Miami, FL 33174

Jennifer Rodan
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

John McWhirter, Jr.
McWhirter, Reeves Law Firm
400 North Tampa St., Suite 2450
Tampa, FL 33602

R. Wade Litchfield
Florida Power & Light Co.
700 Universe Blvd.
Juno Beach, FL 33408-0420

Susan D. Ritenour
Richard McMillan
Gulf Power Company
One Energy Place
Pensacola, FL 32520-0780

Norman H. Horton, jr.
Fred R. Self
Messer Law Firm
P.O. Box 1876
Tallahassee, FL 32302-1876

Brenda Irizarry
Tampa Electric Company
P.O. Box 111
Tampa, FL 33602-0111

Jeffery A. Stone
Russell Badders
P.O. Box 12950
Pensacola, FL 32591

Lieutenant Colonel Karen White
Captain Damund Williams
Federal Executive Agencies
139 Barnes Drive, Suite 1
Tyndall AFB, FL 32403-5319

Cheryl Martin
Florida Public Utilities Company
P.O. Box 3395
West Palm Beach, FL 33402-3395

John T. Burnett
Post Office Box 14042
St. Petersburg, FL 33733

Florida Retail Federation
100 E. Jefferson Street
Tallahassee, FL 32301

Michael B. Twomey
Post Office Box 5256
Tallahassee, FL 32314-5256

Robert Scheffel Wright
Young van Assenderp, P.A.
225 S. Adams St., Ste. 200
Tallahassee, FL 32301

Joseph A. McGlothlin
Associate Public Counsel

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor	DOCKET NO. 060001-EI FILED: AUGUST 10, 2006

APPENDIX

Attachment A

Excerpt from Babcock and Wilcox's Description of Boilers and "Design Fuel" for Crystal River Units 4 and 5

Instructions

for the

Care and Operation

of

Babcock & Wilcox Equipment

furnished on Contract

RB-588

for

Florida Power Corporation

Crystal River Plant Unit 4

Attachment A

Progress Energy

UNIT DESCRIPTION

PLANT

This unit is installed as Unit No. 4 at the Crystal River Plant located near Crystal River, Florida. Plant elevation is 11 feet above sea level.

The unit supplies steam to a GE turbine rated at 665 MW. The consulting engineer is Black & Veatch, Kansas City, Missouri.

BOILER

This is a semi-indoor, balanced draft Carolina Type Radiant Boiler designed for pulverized coal firing. The unit has 54 Dual-Register burners arranged in three rows of nine burners each on both the front and rear walls. Furnace dimensions are 79 feet wide, 57 feet deep, and 201 feet from the centerline of the lower wall headers to the drum centerline. The steam drum is 72 inches ID.

The maximum continuous rating is 5,239,600 lb/hr of main steam flow at 2640 psig and 1005° F at the superheater outlet with a reheat flow of 4,344,700 lb/hr at 493 psig and 1005° F with a normal feedwater temperature of 546° F. This is a 5% overpressure condition. The full load rating is 4,737,900 lb/hr of main steam flow at 2500 psig and 1005° F with a reheat flow of 3,959,800 lb/hr at 449 psig and 1005° F with a normal feedwater temperature of 535° F. Main steam and reheat steam temperatures are controlled to 1005° F from MCR load down to half load (2,368,900 lb/hr) by a combination of gas recirculation and spray attemperation.

The unit is designed for cycling service and is provided with a full boiler by-pass system. The unit can be operated with either constant or variable turbine throttle pressure from 63% of full load on down.

The design pressures of the boiler, economizer, and reheater are 2975, 3050, and 750 psig respectively.

Steam for boiler soot blowing is taken off the primary superheater outlet header. Steam for air heater soot blowing is taken off the secondary superheater outlet.

SCOPE OF SUPPLY

The major items of equipment supplied by B&W include:

- RBC unit pressure parts including boiler, primary and secondary superheater, economizer, and reheater.
- Fifty-four Dual-Register burners and lighters.
- Six MPS-89GR pulverizers and piping to burners.
- By-pass system including valves and piping.
- Two stages of superheat attemperators (first stage tandem) and one stage of reheat attemperation (2 nozzles); nozzles only, no block or control valves or spray water piping.
- Three Rothemuhle air heaters (one primary and two secondary).
- Ducts from secondary air heaters to windbox.

RB-588 Sept 81

- Primary air system: two TLT centrifugal PA fans and ducts from fans to pulverizers.
- Gas recirculation system: one TLT centrifugal GR fan, one dust collector and flues.
- Six Stock gravimetric coal feeders and drives.
- Bailey burner controls.
- Safety valves and ERV.
- Brickwork, refractory, insulation and lagging (BRIL).
- Seal air piping and fans.
- Erection.
- Recommended spare parts.

FUEL

The guarantees for this unit are based on firing a 50/50 blend of Eastern bituminous and Western sub-bituminous coal. The performance coal is classified as high slagging and medium fouling. Performance was also checked on Illinois deep-mined coal which is classified as severe slagging and high fouling. The furnace and convection pass are designed for a severe slagging and severe fouling coal.

Ultimate Analysis: % by Weight

	Performance	Illinois
Ash	7.90	13.00
Sulfur	0.49	4.20
Hydrogen	3.90	4.40
Carbon	58.80	62.00
Chlorine	0.03	0.02
Water	18.50	10.00
Nitrogen	1.10	1.38
Oxygen	9.28	5.00
Total	100.00	100.00
Higher Heating Value	10285 Btu/lb	11000 Btu/lb

Attachment B

Excerpt, Florida Power Corporation's Application for Certification of Crystal River Units 4 and 5 under the Florida Electrical Power Plant Siting Act

(Discussion of Fuels)

3.2 FUEL

3.2.1 Fuel Types and Quantities

The coal supplies for the Crystal River Plant Units 4 and 5 have not at the present time been committed. Present plans are to utilize coal, or a blend of coals, which will meet the EPA sulfur emission standards without the use of flue gas scrubbers.

The coals which will provide this compliance with the EPA standards are found in two geographical portions of the country; principally in the far western coal fields, and in the Appalachian coal fields. The Appalachian coals are generally a high quality, high BTU, high ash fusion, low sulfur coal. The western coals are generally lower quality, low BTU, high ash, high moisture, but extremely low sulfur coals.

The proposed design coal for the Crystal River Units 4 and 5 is a 50/50 blend of a typical Appalachian and western coal. The fuel and ash analyses for the 50/50 design blend are shown in Tables 3.2-1 and 3.2-2, respectively.

At the rated net output (640 MW), and the design blend coal heating value of approximately 23 923 kJ/kg (10,285 BTU/LB), the coal consumption will be approximately 294 000 kg (648,000 LB) per hour for each unit. The average coal consumption per year over the 30-year life of Units 4 and 5 will be approximately 1 700 000 metric

Attachment C

Letter from W.W. Vierday of Florida Power Corporation to Florida Department of Environmental Regulation, dated February 3, 1978

Subject: Proposed Supply of Coals to Crystal River Units 4 and 5 from Western and Eastern Sources in Approximately Equal Tonnages

Florida Power
CORPORATION

February 3, 1978
FPC 0120

RECEIVED
FEB 9 1978
DIVISION OF
ENVIRONMENTAL PERMITTING

Mr. Hamilton S. Oven, Jr.
Florida Department of Environmental Regulation
2562 Executive Center Circle, East
Montgomery Building
Tallahassee, Florida 32301

Subject: Crystal River Units 4 & 5
Site Certification Application
File Code: REG 2

Dear Mr. Oven:

This is in response to your request for information surrounding our Site Certification Application per our meeting in Tallahassee January 1, 1978. In regards to our proposed fuel delivery alternatives, this is to advise you that low sulfur coal for Crystal River Units 4 and 5 will be delivered to the Plant site by barge from the West and by unit train from the Appalachian area in approximately equal tonnages. The total requirements of these two units will be about 3,200,000 tons annually, or about 1,600,000 tons by water and 1,600,000 tons by rail. Unit trains from the Appalachian Region to Crystal River are capable of hauling 7,000 tons in seventy 100-ton cars. This will result in the need for about 229 unit train deliveries annually to supply the 1,600,000 ton Appalachian coal requirements.

Rail deliveries for existing Units 1 and 2, also in 7,000 ton unit trains, are expected to arrive at the rate of about 130 trains annually. This when combined with the anticipated rail delivery for Crystal River Units 4 and 5 will bring the annual total to 359 loaded trains or about one per day. When considering return of empty cars, there will be a total of two 70-car trains crossing US 19 almost every day.

The rail cars and motive power units will be dedicated full time to unit train coal movement to Crystal River. Terms of our tariff with the railroad will not provide for any switching at the Plant site and will require unloading

Attachment C

and release of the train within a four-hour period during which time the engines will never be uncoupled from the cars. Upon completion of unloading, the train will leave the Plant site on a return trip to the origin coal loading mine or tipple.

A 70-car train coupled with engines and caboose will be less than three-quarters mile in length with permissible speed on our spur being 25 mph. The terms of our agreement with the State Road Department limit obstruction of traffic on US 19 to five-minute intervals; however, at the allowable train speed and with a three-quarters mile train length, crossing can be completed in less than two minutes. Combined with the expected one train per day delivery, this would result in traffic on US 19 being delayed by our unit trains under two minutes on each arrival and for another, less than two-minute interval, within the next four hours on departure of the train.

Unloading can be accomplished on a 24-hour per day, seven-day per week schedule. Since the unit trains will be in continuous service between the Plant and the origin loading point, crossing of US 19 may occur at any time during the day or night.

In regards to your request for the date of our proposed signing of coal contracts and the duration of contracts if low sulfur coal is to be used, we can only offer some general guidelines at the present. We would expect to negotiate contracts or agreements covering coal supply of from 10 to 20 year duration. Longer term options or even ownership may be a part of some of our contracts. We currently do not have an anticipated signing date for any contracts for low sulfur coal for Crystal River Units 4 and 5.

Please advise if there are questions or if we can furnish any additional information at the present time.

Sincerely,

W. W. Vierday

W. W. Vierday
Manager
Licensing Affairs

WWV/bz

xc: Mr. John Herrman, EPA
Mr. J. T. Rodgers
Mr. J. A. Hancock
Mr. W. S. O'Brien
Mr. R. L. Bourn
Mr. K. F. Kosky, ESE

Attachment D

Excerpt, 1996 Application for Title V "Air Permit" (Proposed Fuels for Crystal River Units 4 and 5)

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Attachment D

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Fossil Fuel Steam Generator Unit 4**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ ] Unknown **004**		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [X] Yes [ ] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): **Pulverized coal dry bottom boiler, wall-fired.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Bituminous coal**	
2. Source Classification Code (SCC): **1-01-002-02**	
3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **277.7**	5. Maximum Annual Rate: **2,432,725**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.7**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **24**	
10. Segment Comment (limit to 200 characters): **1. Heat content based on 12,000 Btu/lb. 2. Maximum sulfur content based on SO2 emission limit of 1.2 lb/MMBtu; Condition of Certification for Units 4 and 5**	

Attachment D

ATTACHMENT CR-E03-L2

FUEL ANALYSIS
COAL

Parameter	Value
Moisture content (%)	7.1
Ash content (%)	8.3
Sulfur content (%)	0.7 (maximum)
Heat content (Btu/lb)	12,200 (minimum) 13,200 (maximum)

Note: This coal is burned in Units No. 4 and 5. Except where noted, the values listed are general or typical values based upon information obtained from the suppliers. The coal is supplied by approximately 4 suppliers in eastern Kentucky, Virginia, and West Virginia.

Attachment D

E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **EU4, See CR-FI-E2**	
2. Emission Point Type Code: [x]1 [ ]2 [ ]3 [ ]4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Pulverized coal dry bottom boiler, wall-fired**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	
5. Discharge Type Code: [ ]D [ ]F [ ]H [ ]P [ ]R [x]V [ ]W	
6. Stack Height:	**600** feet
7. Exit Diameter:	**25.5** feet
8. Exit Temperature:	**253** °F

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Bituminous coal**	
2. Source Classification Code (SCC): **10100202**	
3. SCC Units: **Tons burned**	
4. Maximum Hourly Rate: **277.7**	5. Maximum Annual Rate: **2,433,725**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.7**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **24**	
10. Segment Comment (limit to 200 characters): **1. Heat content based on 12,000 Btu/lb. 2. Maximum sulfur content based on SO2 emission limit of 1.2 lb/MMBtu; Condition of Certification for Units 4 and 5**	

Attachment E

Excerpt, Florida Department of Environmental Protection's Notice of Intent of Issue Air Construction Permit, dated May 25, 1999

Subject: Proposal of Florida Power Corporation to burn "Bituminous Coal Briquettes" at Crystal River

Attachment F

Attachment E

In the Matter of an
Application for Permit by:

Florida Power Corporation
3201 34th Street South
St. Petersburg, Florida 33711

DEP File No. 0170004-006-AC
Crystal River Power Plant
Citrus County
Coal/Briquette Fuel Mixture

INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit (copy of Draft permit attached) for the proposed project, detailed in the application specified above and the enclosed Technical Evaluation and Preliminary Determination, for the reasons stated below.

The applicant, Florida Power Corporation, applied on March 24, 1999 to the Department for an air construction permit for its Crystal River Plantlocated west of U.S. Highway 19, north of Crystal River, south of the Cross State Barge Canal, Citrus County. The permit is to allow the combustion of a coal/briquette fuel mixture in Crystal River Units 1,2,4, and 5. The briquettes will be blended with some of the regular coal supply and Florida Power Corporation states the sulfur content of the coal/briquette fuel mixture, percent by weight and averaged on an annual basis, will not exceed the average sulfur content of the coal combusted in each unit averaged for the past three years.The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit is required to allow the combustion and to restrict the sulfur content of the coal/briquette fuel.

The Department intends to issue this air construction permit based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Construction Permit. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of Public Notice of Intent to Issue Air Permit. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

Attachment F

Letter from Florida Power Corporation to Florida Department of Environmental Regulation, dated March 19, 1999

Subject: Request to amend pending application for Title V air permit to add "bituminous coal briquettes" as fuel for Crystal River Units 4 and 5

Attachment F

Florida Power
CORPORATION

RECEIVED
MAR 17 1999
BUREAU OF
AIR REGULATION

March 15, 1999

Mr. Clair Fancy, P.E.
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, Florida 32399-2400

Dear Mr. Fancy:

Re: Petroleum Coke Permitting

As you know, a final construction permit authorizing a blend of coal and petroleum coke to be burned in Florida Power Corporation's (FPC) Crystal River Units 1 and 2 was issued by the DEP on January 11, 1999. FPC requests that the conditions authorizing use of the blended fuel be incorporated into the Title V permit for these units.

In addition, the DEP is currently reviewing FPC's submittal to allow use of "coal briquettes" in Crystal River Units 1, 2, 4, and 5. FPC understands that approval is forthcoming, pending receipt of a $250 processing fee. Therefore, FPC also requests that the Title V permit also reflect this approval at the appropriate time.

Thank you for your consideration of these requests. Please contact Mike Kennedy at (727) 826-4334 if you have any questions.

Sincerely,

W. Jeffrey Pardue, C.E.P.
Director

ONE POWER PLAZA, 263 - 13th Avenue South, BB1A, St. Petersburg, FL 33701-5511 •
P.O. Box 14042, BB1A • St. Petersburg • Florida 33733-4042 • (727) 866-5151
A Florida Progress Company

Attachment G

Excerpt, Final Title V "Air Permit" issued for Crystal River Units 4 and 5 in 2000

(Restrictions on Approved Fuels)

Florida Power Corporation
Crystal River Plant
Facility ID No.: 0170004
Citrus County

Initial Title V Air Operation Permit
FINAL Permit No.: 0170004-004-AV

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Title V Section

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Telephone: 850/488-1344
Fax: 850/922-6979

Compliance Authority:
Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

Subsection B. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
004	Fossil Fuel Steam Generator, Unit 4, a dry bottom wall-fired unit, rated at 760 MW, 6665 MMBtu/hr, capable of burning bituminous coal, a bituminous coal and bituminous coal briquette mixture, and used oil, with number 2 fuel oil as a startup fuel, and natural gas as a startup and low-load flame stabilization fuel, with emissions exhausted through a 600 ft. stack.
003	Fossil Fuel Steam Generator, Unit 5, a dry bottom wall-fired unit, rated at 760 MW, 6665 MMBtu/hr, capable of burning bituminous coal, a bituminous coal and bituminous coal briquette mixture, and used oil, with number 2 fuel oil as a startup fuel, and natural gas as a startup and low-load flame stabilization fuel, with emissions exhausted through a 600 ft. stack.

Fossil Fuel Steam Generators, Units 4 and 5, are pulverized coal dry bottom boilers, wall-fired. Emissions are controlled from each unit with a high efficiency electrostatic precipitator, manufactured by Combustion Engineering.

{Permitting Notes: These emissions units are regulated under Acid Rain, Phase I and II and Rule 62-210.300, F.A.C., Permits Required; 40 CFR 60 Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971; and, Power Plant Siting Certification PA 77-09 conditions. Fossil fuel fired steam generator Unit 4 began commercial operation in 1982. Fossil fuel fired steam generator Unit 5 began commercial operation in 1984.}

The following specific conditions apply to the emissions unit(s) listed above:

{Permitting note: In addition to the requirements listed below, these emissions units are also subject to the standards and requirements contained in the Acid Rain Part of this permit (see Section IV).}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum operation heat input rates are as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
004	6665	Bituminous Coal and Bituminous Coal /Bituminous Coal Briquette Mixture
003	6665	Bituminous Coal and Bituminous Coal /Bituminous Coal Briquette Mixture

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

B.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **I.11.**
[Rule 62-297.310(2), F.A.C.]

B.3. Methods of Operation. Fuels. The only fuel allowed to be burned is bituminous coal or bituminous coal and bituminous coal briquette mixture with the exception that number 2 fuel oil may be used as an ignitor fuel, and natural gas may be used as a startup and low-load flame stabilization fuel. Fuel oil shall not contain more than 0.73% sulfur by weight. These emissions units may also burn used oil in accordance with other conditions of this permit (see **Subsection K**).
[Rule 62-213.410, F.A.C.; and, PPSC PA 77-09 and modified conditions]

Emission Limitations and Standards

B.4. Pursuant to 40 CFR 60.42 Standard For Particulate Matter.

(a) No owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which:
(1) Contain particulate matter in excess of 43 nanograms per joule heat input (0.10 lb per million Btu) derived from fossil fuel.
(2) Exhibit greater than 20 percent opacity, six minute average, except for one six-minute period per hour of not more than 27 percent opacity.
[40 CFR 60.42(a)(1) & (2)]

B.5.a. Standard For Sulfur Dioxide.

(a) No owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:
(1) 340 nanograms per joule heat input (0.80 lb per million Btu), 24-hour average, derived from liquid fossil fuel.
(2) 520 nanograms per joule heat input (1.2 lb per million Btu), 24-hour average, derived from solid fossil fuel.
(b) When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) shall be determined by proration using the following formula:

$PS_{SO2} = [y(340) + z(520)]/(y+z)$

where:
PS_{SO2} is the prorated standard for sulfur dioxide when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired,
y is the percentage of total heat input derived from liquid fossil fuel, and
z is the percentage of total heat input derived from solid fossil fuel.
(c) Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.
[40 CFR 60.43(a), (b) and (c); and, PPSC PA 77-09]

Attachment H

Excerpt, PEF's 2004 Application for Renewal of its Title V "Air Permit"

(Crystal River Units 4 and 5 sections)

Attachment H

Department of
Environmental Protection
Division of Air Resource Management

SUBMITTED APPLICATION REPORT
APPLICATION FOR AIR PERMIT - LONG FORM

--- Form Effective 06/13/03 ---

Application Number: 358- 1

Application Name: PROGRESS ENERGY CRYSTAL RIVER PERMIT RENEWAL

Date Submitted: 30 June 2004

I. APPLICATION INFORMATION

Air Construction Permit - Use this form to apply for an air construction permit for a proposed project:

- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

Air Operation Permit - Use this form to apply for:

- an initial federally enforceable state air operation permit (FESOP); or
- an initial/revised/renewal Title V air operation permit.

Air Construction Permit & Title V Air Operation Permit (Concurrent Processing Option) - Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: PROGRESS ENERGY FLORIDA, INC.		
2. Site Name: CRYSTAL RIVER POWER PLANT		
3. Facility Identification Number: 0170004		
4. Facility Location...		
Street Address or Other Locator:	NORTH OF CRYSTAL RIVER, WEST OF U.S. 19. 15760 WEST POWER LINE ST.	
City: CRYSTAL RIVER	County: CITRUS	Zip Code: 34428
5. Relocatable Facility? ☐ Yes ☑ No		6. Existing Title V Permitted Facility ☐ Yes ☑ No

Attachment H

III. EMISSIONS UNIT INFORMATION
A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)
   - ☑ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
   - ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)
   - ☑ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
   - ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
   - ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   FOSSIL FUEL STEAM GENERATOR-5 (PHASE I & II ACID RAIN UNIT)

3. Emissions Unit Identification Number: 3

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		01-DEC-84	49	☑ Yes ☐ No

9. Package Unit Manufacturer: Model Number:

10. Generator Nameplate Rating: 760 MW

11. Emissions Unit Comment:
    PULVERIZED COAL DRY BOTTOM BOILER, WALL-FIRED.

Attachment H

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type): Bituminous coal & bituminous coal briquette mixture		
2. Source Classification Code (SCC): 10100202	3. SCC Units: Tons Bituminous Coal Burned	
4. Maximum Hourly Rate: 277.7	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 24
10. Segment Comment: Bituminous coal and coal briquette		
Is this a valid segment? Yes		

Segment Description and Rate: Segment 2 of 4

1. Segment Description (Process/Fuel Type): Distillate fuel oil		
2. Source Classification Code (SCC): 10100501	3. SCC Units: 1000 Gallons Distillate Oil (No. 1 & 2) Burned	
4. Maximum Hourly Rate: 48.297	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: .73	8. Maximum % Ash: .1	9. Million Btu per SCC Unit: 138
10. Segment Comment: Fuel oil used for startup		
Is this a valid segment? Yes		

III. EMISSIONS UNIT INFORMATION
A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)
   - ☑ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
   - ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
   - ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   FOSSIL FUEL STEAM GENERATOR-4 (PHASE I & II ACID RAIN UNIT)

3. Emissions Unit Identification Number: 4

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		01-DEC-82	49	☑ Yes ☐ No

9. Package Unit Manufacturer: Model Number:

10. Generator Nameplate Rating: 760 MW

11. Emissions Unit Comment:
    PULVERIZED COAL DRY BOTTOM BOILER, WALL-FIRED.

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type): Bituminous coal & bituminous coal briquette mixture		
2. Source Classification Code (SCC): 10100202	3. SCC Units: Tons Bituminous Coal Burned	
4. Maximum Hourly Rate: 277.7	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 24
10. Segment Comment: Bituminous coal and coal briquette.		
Is this a valid segment? Yes		

Segment Description and Rate: Segment 2 of 4

1. Segment Description (Process/Fuel Type): Distillate fuel oil		
2. Source Classification Code (SCC): 10100501	3. SCC Units: 1000 Gallons Distillate Oil (No. 1 & 2) Burned	
4. Maximum Hourly Rate: 48.297	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: .73	8. Maximum % Ash: .1	9. Million Btu per SCC Unit: 138
10. Segment Comment: Fuel oil used for startup		
Is this a valid segment? Yes		

Attachment I

Excerpt, Renewed Title V Air Permit issued to PEF (Effective January 2005)

STATEMENT OF BASIS

Title V FINAL Renewal Permit No.: 0170004-009-AV
Progress Energy Florida
Crystal River Plant
Citrus County

The initial Title V air operation permit went final on December 31, 1999, and effective on January 1, 2000. This Title V air operation permit with revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

This facility consists of four coal-fired fossil fuel steam generating (FFSG) units with electrostatic precipitators; two natural draft cooling towers for FFSG Units 4 and 5; helper mechanical cooling towers for FFSG Units 1, 2 and Nuclear Unit 3; coal, fly ash, and bottom ash handling facilities, and relocatable diesel fired generator(s). The nuclear unit (Unit 3) is not considered part of this permit, although certain emissions units associated with Unit 3 are included in this permit.

This renewal is issued without changes to the original permit with the exception of the following (within the body of the permit documents, additions are shown as underscored and deletions are shown as ~~strikethrough~~):

1) References to the operator/owner were changed to say "Progress Energy Florida".
2) Minor changes were made to the Insignificant and Unregulated Emission Unit lists.
3) The renewal includes a CAM Plan.
4) The renewal includes a revised Acid Rain Part Application and Phase II NO_X Compliance Plan. In this regard, a state-only NO_X emission limit was also included.
5) Minor changes were made to Specific Conditions A.19., B.14., G.5. and G.6.

Progress Energy Florida
Crystal River Plant
Facility ID No.: 0170004
Citrus County

Title V Air Operation Permit Renewal
FINAL Permit No.: 0170004-009-AV

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Title V Section

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Telephone: 850/488-1344
Fax: 850/922-6979

Compliance Authority:
Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

Subsection B. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
004	Fossil Fuel Steam Generator, Unit 4, a dry bottom wall-fired unit, rated at 760 MW, 6665 MMBtu/hr, capable of burning bituminous coal, a bituminous coal and bituminous coal briquette mixture, and used oil, with number 2 fuel oil as a startup fuel, and natural gas as a startup and low-load flame stabilization fuel, with emissions exhausted through a 600 ft. stack.
003	Fossil Fuel Steam Generator, Unit 5, a dry bottom wall-fired unit, rated at 760 MW, 6665 MMBtu/hr, capable of burning bituminous coal, a bituminous coal and bituminous coal briquette mixture, and used oil, with number 2 fuel oil as a startup fuel, and natural gas as a startup and low-load flame stabilization fuel, with emissions exhausted through a 600 ft. stack.

Fossil Fuel Steam Generators, Units 4 and 5, are pulverized coal dry bottom boilers, wall-fired. Emissions are controlled from each unit with a high efficiency electrostatic precipitator, manufactured by Combustion Engineering.

Compliance Assurance Monitoring (CAM) Requirements
These emissions units are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.
[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

{Permitting Notes: These emissions units are regulated under Acid Rain, Phase I and II and Rule 62-210.300, F.A.C., Permits Required; 40 CFR 60 Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971; and, Power Plant Siting Certification PA 77-09 conditions. Fossil fuel fired steam generator Unit 4 began commercial operation in 1982. Fossil fuel fired steam generator Unit 5 began commercial operation in 1984.}

The following specific conditions apply to the emissions unit(s) listed above:

{Permitting note: In addition to the requirements listed below, these emissions units are also subject to the standards and requirements contained in the Acid Rain Part of this permit (see Section IV).}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum operation heat input rates are as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
004	6665	Bituminous Coal and Bituminous Coal /Bituminous Coal Briquette Mixture
003	6665	Bituminous Coal and Bituminous Coal /Bituminous Coal Briquette Mixture

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what

percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

B.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **I.11.**
[Rule 62-297.310(2), F.A.C.]

B.3. Methods of Operation. Fuels. The only fuel allowed to be burned is bituminous coal or bituminous coal and bituminous coal briquette mixture with the exception that number 2 fuel oil may be used as an ignitor fuel, and natural gas may be used as a startup and low-load flame stabilization fuel. Fuel oil shall not contain more than 0.73% sulfur by weight. These emissions units may also burn used oil in accordance with other conditions of this permit (see **Subsection K**).
[Rule 62-213.410, F.A.C.; and, PPSC PA 77-09 and modified conditions]

Emission Limitations and Standards

B.4. Pursuant to 40 CFR 60.42 Standard For Particulate Matter.

(a) No owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which:
(1) Contain particulate matter in excess of 43 nanograms per joule heat input (0.10 lb per million Btu) derived from fossil fuel.
(2) Exhibit greater than 20 percent opacity, six minute average, except for one six-minute period per hour of not more than 27 percent opacity.
[40 CFR 60.42(a)(1) & (2)]

B.5.a. Standard For Sulfur Dioxide.

(a) No owner or operator shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:
(1) 340 nanograms per joule heat input (0.80 lb per million Btu), 24-hour average, derived from liquid fossil fuel.
(2) 520 nanograms per joule heat input (1.2 lb per million Btu), 24-hour average, derived from solid fossil fuel.
(b) When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) shall be determined by proration using the following formula:

$PS_{SO2} = [y(340) + z(520)]/(y+z)$

where:
PS_{SO2} is the prorated standard for sulfur dioxide when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired,
y is the percentage of total heat input derived from liquid fossil fuel, and
z is the percentage of total heat input derived from solid fossil fuel.
(c) Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.
[40 CFR 60.43(a), (b) and (c); and, PPSC PA 77-09]

B.5.b. Standard For Sulfur Dioxide. The maximum percent sulfur content of the coal/briquette mixture shall not exceed 0.68%, by weight, averaged on an annual basis. {See specific conditions **B.10.** and **B.11.**}
[Rule 62-213.440, F.A.C.; and, 0170004-006-AC]

B.6. Pursuant to 40 CFR 60.44 Standard For Nitrogen Oxides.

Attachment J

Results of Analysis of Excess Costs (Fuel Costs and Costs of Extra SO2 Allowances) Occasioned by Failure to Utilize "Design Basis" Blend of PRB and Bituminous Coals in Crystal River Units 4 and 5 during 1996-2005

ATTACHMENT J

RESULTS OF ANALYSIS

EXCESSIVE COSTS OF COAL AND EXTRA SO_2 ALLOWANCES RESULTING FROM FAILURE TO BLEND PRB SUB-BITUMINOUS COAL WITH BITUMINOUS COAL IN CRYSTAL RIVER UNITS 4 AND 5
1996-2005

Year	Excess Coal Costs $	Excess SO_2 Allowance Cost $	Total Excess Fuel Charges $
1996	1,232,000	N/A	1,232,000
1997	6,821,100	N/A	6,821,100
1998	8,803,584	N/A	8,803,584
1999	9,509,968	N/A	9,509,968
2000	5,617,083	1,497,278	7,114,361
2001	16,355,149	1,897,541	18,252,690
2002	22,300,132	1,410,049	23,710,181
2003	16,075,721	1,413,510	17,489,231
2004	16,551,720	4,196,799	20,748,519
2005	21,890,221	7,513,540	29,403,761
Total w/o Interest	125,156,678	17,928,717	143,085,395

Assumptions and notes:

(1) 1996, PRB = 500,000 tons: 1997-2005, PRB = 50% of total tonnage
(2) Btu's obtained from PRB coal are 40% of total Btu's purchased for Crystal River Units 4 and 5 during years in which a 50/50 blend by tonnage is assumed
(3) Analysis examines the actual delivered cost of fuel for Crystal River Units 4 and 5 delivered to IMT as reported by PEF to FERC, and the corresponding delivered cost of transported PRB sub-bituminous coal at the market price that prevailed at the time
(4) Reflects cost of SO_2 allowances that would have been saved by a PRB blend, valued at market value that prevailed at the time
(5) Interest not included in calculations