



Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: December 1, 2006

TO: Lisa Polak Edgar, Chairman
J. Terry Deason, Commissioner
Isilio R. Arriaga, Commissioner
Matthew M. Carter II, Commissioner
Katrina J. Tew, Commissioner

FROM: Division of Economic Regulation (Matlock, ^{sum}Lester, McNulty) *WAM*
Office of the General Counsel (Bennett) *LB* *WAM* *RT* *WAM*

RE: Docket No. 060001-EI – Fuel and Purchased Power Cost Recovery Clause with
Generating Performance Incentive Factor

Continuation of hearing for the purpose of determining whether to adopt a modification to the Generating Performance Incentive Factor (GPIF) to include a “dead band” for GPIF rewards and penalties. Another purpose of the hearing is to determine whether the GPIF modification should be applied to 2006 if the Commission decides to adopt the modification.

Pursuant to notice issued November 27, 2006, the Commission announced the continuation of the fuel clause hearing from November 6-8, 2006, to December 8, 2006, at 9:30 a.m. One of the purposes of this hearing is for the Commission to make a determination whether to adopt a modification to the Generating Performance Incentive Factor (GPIF) to include a “dead band” for GPIF rewards and penalties. Another purpose of the hearing is to determine whether the GPIF modification should be applied to 2006 if the Commission decides to adopt the modification.

During the hearing on November 8, 2006, the Commission determined that the parties should be afforded the opportunity to file briefs on the unresolved issues in this docket. It was further determined that staff would provide a written recommendation on the unresolved issues by December 1, 2006. Staff’s recommendation is attached.

cc: Mary Bane
Chuck Hill
Division of Commission Clerk & Administrative Services

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**FUEL AND PURCHASED POWER COST RECOVERY CLAUSE
DOCKET NO. 060001-EI
STAFF RECOMMENDATION**

Case Background

On September 19, 1980, by Order 9558, the Commission adopted an incentive factor known as the Generating Performance Incentive Factor (GPIF). The GPIF rewards generating utilities for efficient power plant operation and imposes penalties for inefficient operation. As part of its annual fuel proceedings, the Commission approves targets and ranges for equivalent availability factor (EAF) and heat rate for the projection period for the most used generating units. Targets are based largely on historical performance and each target is accompanied by a range. Following the projection period, the actual EAF's and heat rates are compared to their respective targets. Each actual EAF and heat rate is assigned a number of points, between -10 and +10, based on its position in its respective target range. Each unit's number of points for EAF and heat rate is weighted based on estimated fuel savings, and the sum of the weighted numbers of points, labeled Generating Performance Incentive Points (GPIP), determines the overall reward or penalty. System-wide GPIP is also between -10 and +10, and it represents the system-wide comparison of actual performance to target performance. The GPIF is part of the Commission's annual adjustment to the Fuel and Purchased Power Cost Recovery Factor. Based on the GPIP score, the maximum reward or penalty a company can receive is between +25 (equal to +10 GPIP's) and -25 (equal to -10 GPIP's) basis points return on equity.

On May 15, 2006, the Office of Public Counsel (OPC) petitioned the Commission for modification of the reward/penalty criteria of the GPIF mechanism. OPC petitioned for two specific modifications: (1) the establishment of a maximum and minimum GPIP that a utility must achieve in order to be rewarded or penalized, thus creating a performance "dead band" in which no rewards or penalties are received; and (2) the establishment of system-wide minimum values for EAF and heat rate. On May 20, 2006, OPC filed the direct testimony of expert witness James A. Ross in support of its petition. OPC petitioned for resolution of only the first requested modification in the November 6-8, 2006 fuel hearing in Docket No. 060001-EI, In re: Fuel and Purchased Power Cost Recovery Clause and Generating Performance Incentive Factor. In its petition, OPC requested that the Commission direct parties to address the second modification during proceedings in Docket No. 070001-EI. The Commission granted this request in Order No. PSC-06-0710-PCO-EI.

The four generating investor-owned electric utilities filed direct testimony regarding the proposed modifications on August 22, 2006. In the fuel cost recovery hearing, the utilities, Commission staff, and the parties cross-examined the witnesses on two issues:

- (1) Issue 21: Should the Commission amend or modify the existing GPIF mechanism so as to incorporate a "dead band" around the scale of Generating Performance Incentive Points in the amounts proposed by OPC?, and

- (2) Issue 22: If the "dead band" amendment to the GPIF mechanism is implemented by the Commission, should it be applied for the current year so that the rewards or penalties are applied commencing January 1, 2007?

Also in the hearing, Joseph A. McGlothlin, Associate Public Counsel, asked that staff's recommendation on Issues 21 and 22 be postponed so that the parties could brief the evidence for these issues. The Commission continued the hearing to December 8, 2006, to allow briefs to be filed and to allow staff to prepare a written recommendation on the issues.

The Commission has jurisdiction over this subject matter pursuant to Chapter 366, Florida Statutes, including Sections 366.04, 366.05, and 366.06, Florida Statutes.

Discussion of Issues

Issue 21: Should the Commission amend or modify the existing GPIF mechanism so as to incorporate a “dead band” around the scale of Generating Performance Incentive Points in the amounts proposed by OPC?

Recommendation: No. The Commission should not adopt the OPC’s proposed “dead band” modification to the GPIF because the conclusions the OPC put forth to demonstrate the need for the modification have not been substantiated. The OPC failed to show any past rewards were not the result of improvements in actual performance compared to target performance, nor did the OPC show that the GPIF method of basing rewards and penalties on comparisons of actual to target performance was flawed. Also, the GPIF was designed as a bilateral and incremental incentive mechanism, and no evidence has been presented to show that the Gift’s scaling of rewards and penalties is inappropriate. (Matlock)

Parties’ Positions:

FPL: No. The current GPIF methodology, as approved by the Commission, has worked as intended by providing an ongoing incentive for the efficient operation of generating units. FPL’s improved unit performance, calculated in accordance with the current GPIF methodology, has saved FPL’s customers an average of over \$14 million per year in fuel costs during the last sixteen years, which is more than double the average GPIF reward received by FPL during the same period. Pock’s “dead band” proposal would virtually eliminate the GPIF incentive. In addition, Pock’s proposal is unfairly asymmetric: it would exclude twice as large a range of performance improvements from receiving rewards as it would exclude performance declines from receiving penalties. (SONNELITTER)

GULF: No. The Commission should not amend or modify the existing GPIF mechanism to incorporate a “dead band” around the scale of Generating Performance Incentive Points as proposed by OPC. (Noack)

PEF: No. Modifying the GPIF mechanism so as to incorporate a “dead band” as proposed by OPC would bias the system toward penalties. The GPIF mechanism is intended to be an even-handed mechanism. As such, PEF opposes the change to the GPIF mechanism as proposed by OPC. (Oliver)

TECO: No. The proposed dead band approach would modify the GPIF methodology in an asymmetrical way to favor penalties. It is inconsistent with the primary objective of the GPIF program which is to encourage improved performance through a fair and balanced application of the incentive/penalty mechanism. (Witness: Smotherman)

AARP: Agree with OPC.

FEA: No position.

FIPUG: Yes.

FRF: Agree with OPC.

White Sprs.: Agree with OPC.

AG: Agree with OPC.

OPC: Yes. Under the current methodology the customers have been called on to fund rewards for utilities whose generating efficiency, as measured by heat rate and availability, have not improved and even when efficiency has declined. This is both counterintuitive and unfair to ratepayers. In this proceeding, the Commission should implement a “deadband” around the calculated utility scores, so that only a utility that has demonstrated an improvement of a magnitude that warrants it will receive a monetary reward paid by customers. In Docket 070001, the Commission should consider coupling with this deadband a set of absolute values for each unit that the respective utilities would be required to meet or exceed in order to earn a reward.

Staff Analysis:

OPC’s Position and Argument

Witness Ross recommends that each utility be required to achieve +5 GPIPs or higher in order to be eligible for a GPIF reward, and that each utility achieve -2.5 GPIPs or lower in order to be penalized. Witness Ross thus recommends that the range from -2.5 GPIPs to +5.0 GPIPs be considered a “dead band,” in which there are no rewards or penalties. At the hearing, Witness Ross indicated that it was within the Commission’s discretion to adjust his recommended dead band range as it saw fit in order to achieve the underlying purpose of achieving a meaningful degree of system improvement before granting rewards. (TR-735, TR-755-757)

Witness Ross bases his recommendation for the GPIF dead band on his observation that large net rewards have been achieved over the 1983 to 2004 period but, despite the net reward achievement, the GPIF has not prompted universal improvement in individual unit performance or in system-wide performance. (TR-720-721) His criticism of the GPIF is that a unit’s target performance is based on the unit’s recent performance, resulting in rewards even if recent performance data reflects deterioration in efficiency. (TR-733) Because regulated utilities are obligated to operate efficiently and because target performance can produce rewards for marginal improvement over any level of recent performance, he concludes the Commission should require utilities to achieve exemplary gains in performance in order to achieve rewards. (TR-721-722) He offers his dead band solution as a simple method that can be implemented without delay for achieving the stated objective of treating ratepayers more equitably. (TR-736)

Witness Ross indicates that approximately \$120 million in cumulative net payments (i.e. rewards less penalties) have been made to FPL, PEF, and GULF for the period April 1983 to December 2004. FPL received about \$92 million, PEF received about \$27, and GULF received

about \$3 million. TECO received a cumulative net penalty during this same period of \$2.3 million, but ratepayers made a cumulative net payment to TECO from April 1983 through 2002. (TR-728-729)

Witness Ross bases his claim that the mechanism has not prompted universal improvement in individual unit generating performance or in system-wide performance on his analysis of historical EAF and heat rate performance data. He indicates that, for FPL and PEF, decreases in individual units' EAF's and increases in individual units' heat rates are evidence that such units have shown decreased performance over a 15 year period (1989 to 2004). (EXH 55 and TR-731-732) The witness notes that despite his evidence of performance declines, FPL and Progress have achieved rewards in each of these years.

Regarding system-wide performance results, Witness Ross presented data allegedly showing that for specific years in which Gulf and Progress achieved GPIF rewards, both utility's system-wide EAF declined and system-wide heat rate increased from the previous year. (TR-731-732) Witness Ross suggests that system-wide declining performance resulting in rewards also is observable over longer periods. TECO's increased system-wide EAF and decreased system-wide heat rate from October 1989 through December 2004 is indicative of a decline in performance according to Ross. (EXH 54, Schedule 3, TR-730) TECO's rewards and penalties indicate that TECO received rewards in three of the last ten years (Exhibit JAR-1, Schedule 2) According to Witness Ross, "... over a period when the EAF and HR performance has declined, the utility continued to receive rewards under the GPIF." (TR-730)

Regarding a more recent period's results, Witness Ross presents TECO's system-wide target EAF's target heat rates, actual EAF's, and actual heat rates for the years 2001 through 2004, and notes that TECO was rewarded for its 2004 performance even though TECO's aggregates showed decreased performance between 2001 and 2004 (Exhibit JAR-1, Schedule 4) Witness Ross concludes that the targets for 2004 were low because of lower performance in 2002 and 2003.

Based on the counterintuitive results, where declining performance yields rewards in various instances, Witness Ross proposed a +5.0 point upper limit on the dead band to ensure a meaningful degree of system improvement before granting a reward. (TR-735) At the hearing, he clarified that the Commission had the discretion to adjust the dead band as appropriate in order to achieve the underlying purpose of achieving a meaningful degree of system improvement before granting rewards. (TR-757)

Utility Positions and Arguments

The generating investor-owned electric utilities (the Utilities) testified that the current GPIF methodology, as approved by the Commission, has worked as intended by providing an ongoing incentive for the efficient operation of generating units. FPL Witness Sonnelitter testified that the GPIF has resulted in rewards when the performance of generating units improves relative to GPIF targets, and it has resulted in penalties when their performance has deteriorated compared to those targets. (TR-801)

The utilities did not dispute the reward/penalty amounts cited by Witness Ross. However, Witness Pamela Sonnelitter of Florida Power and Light Company (FPL) testified that FPL's cumulative net reward has been accompanied by larger net fuel-cost savings over the same period. (TR-807) Witness Sonnelitter also testified that the proposed dead band limits would virtually eliminate the possibility of FPL receiving GPIF rewards. (TR-807) Witness William A. Smotherman of Tampa Electric Company (TECO) testified that rewards and penalties are limited to a portion of the associated projected fuel savings or losses. (TR-850)

Regarding OPC Witness Ross's claim that some units' performance declined from 1989 to 2004 while the utilities consistently received rewards, Witness Sonnelitter testified that declines for some units may be related to the dispatch order of units on FPL's system. Witness Sonnelitter testified that newer units are more reliable. (TR-805) Further, newer units are more efficient than older units. As a result, the utility dispatches older units less, and the older units' heat rates will be higher than in earlier periods. (TR-805) Witness Sonnelitter also testified regarding individual unit EAF's and planned outage hours and individual unit heat rates and net output factors, and the difficulty in making comparisons of EAF's or heat rates between periods. (TR-801, TR-806) Witness Sonnelitter further testified, regarding setting heat rate targets and comparing actual heat rates to targets that heat rate targets are actually curves expressing heat rates for various net output factors. (TR-806) Gulf uses an alternative though similar way of setting heat rate targets (i.e., heat rates "as functions of" several variables other than net output factor). (EXH 29, pp 78-93) For Gulf's units at Plant Daniel, one of the several variables used to explain the variation in per-kWh Btu consumption is fuel heat value, or, for coal, Btu's per pound. (EXH 29, pp 90-93) With changes in the sources of coal supply and the differences in fuel heat value among the sources, this "variable" is also important to consider in assessing whether heat rates compare favorably with targets, prior periods' values, etc. This variable is similar to net output factor in explaining the variability unit heat rates.

Regarding OPC Witness Ross' claim that Progress received rewards in years when system wide performance declined, Witness Robert M. Oliver of Progress testified that Progress's 2002 GPIF reward was based on its 2002 performance compared to its 2002 targets. (TR-838-839, 41, 42)

Regarding Witness Ross' claim that system-wide decline in performance over an extended period has resulted in GPIF rewards, TECO's Witness Smotherman testified that part of TECO's GPIF-unit performance since the middle 1990's is attributable to constraints imposed by TECO's need to comply with environmental regulations. (TR-851) Witness Smotherman further testified that according to his calculations, TECO's GPIF-unit availability increased from 68 percent to 73 percent from 1989 through 2004. (TR-856) The comparable EAF's presented graphically by Witness Ross are from about 77 percent (1989-90) to about 71 percent (2004). (EXH 54, Schedule 3, Figure 1) As explained by Witness Smotherman, Witness Ross calculated weighted average EAF's and heat rates using, as weights, "normalized weighting factors," which are used to calculate weighted average GPIF points. (TR-857) According to the calculation method recommended by Witness Smotherman, the appropriate weights for system-wide performance measures are (1) unit capability for EAF and (2) generation for heat rate. (TR-857)

Staff Analysis

Staff agrees that the utilities have achieved large net rewards, but does not agree that the net rewards are large relative to net savings. Staff believes that the net rewards achieved by the four utilities have been based on efficient performance and that efficient performance has resulted in fuel savings that were beneficial to the ratepayers.

The purpose of the GPIF has been stated as "... to encourage utilities to improve the productivity of their base load generating units." (Order No. 9558, pg 7) The degree to which utilities respond to this encouragement has been described as "... improvements from performance targets." (Order No. 9558, pg 8) The purpose of the GPIF has also been stated as "... to provide an incentive for the efficient operation of base load generating units." (Order No. 10168, Sheet No. 3.10) Staff notes these various statements because of Witness Ross's use of the word "improvement" in the basis for his dead-band recommendation. Staff is not convinced that the word "improvement," as used in the GPIF manual, means "increased availability or decreased heat rates in successive periods." Rather, staff believes that the word "improvement" means "actual availability greater than target availability" and "actual heat rate less than target heat rate."

OPC's claim that the dead band would be beneficial is based on actual-to-actual comparisons of performance measures between periods and over several periods. The utilities have shown that actual-to-actual comparisons of EAF's or heat rates between periods does not necessarily indicate whether the utilities have reduced fuel expenses. Because of the difficulties in making comparisons between years for EAF's due to planned outage hours, and for heat rates due to net output factors, staff does not believe that units showing decreases in EAF or increases in heat rates between periods necessarily show declines in performance. Similarly, staff does not believe that units showing increases in EAF's or decreases in heat rates necessarily show improvements in performance. Because of these difficulties, and because the 2002 rewards for Gulf and Progress were based on comparisons of actual performance with target performance, staff believes that Gulf's and Progress's 2002 rewards were properly achieved.

Because TECO has been penalized for its performance for most years since the middle 1990's, Staff is convinced that TECO's performance has declined in recent years. Staff is not convinced that TECO's performance in those years is evidence that the GPIF does not function properly. Staff agrees that the targets for 2004 were low because of lower performance in 2002 and 2003, and that the lower 2004 targets affected the magnitude of TECO's 2004 reward. Because comparisons of actual performance between periods based strictly on EAF's and heat rates are difficult to make, staff is not convinced that TECO's 2004 reward is out of line with the purpose of the GPIF.

Staff agrees that prudent power plant operation is an obligation of an electric utility. However, staff also believes that the GPIF mechanism measures how the utilities carry out that obligation, and that the measurements' result in the rewards and penalties of the present GPIF mechanism. Further, staff does not believe that the GPIF mechanism is the only means for assessing whether a utility meets its obligation to operate power plants prudently. For example,

recovery of replacement fuel expenses incurred during an FPL nuclear power plant outage in 2006 is an issue addressed in the fuel proceeding. (TR-232-234) Whether the utility acted prudently in operating the plant is under examination even before we assess the 2006 GPIF rewards and penalties.

Staff is not convinced that meaningful degrees of system improvement, or exemplary gains in performance, fit the purpose of the GPIF, or that the absence of any type of improvements over prior period's performance indicates that the mechanism does not perform as intended.

Although staff does not recommend a dead band to improve the incentive characteristic of the factor, staff notes that if lessening the probability of rewards being achieved or of penalties being imposed is a desired result, then a dead band would be a way to affect that result. For 2005, the GPIP's ranged from -3.59 to +3.23. (TR-239; TR-391; EX. 40, Sheet 6.101.1; TR-605) The Commission may choose to adopt a dead band with limits other than -2.5 GPIP's and 5.0 GPIP's.

Issue 21: If the “dead band” amendment to the GPIF mechanism is implemented by the Commission, should it be applied for the current year so that the rewards or penalties are applied commencing January 1, 2007?

Recommendation: Yes, if the Commission adopts OPC’s dead-band proposal, the amendment could be applied to the GPIF rewards and penalties for 2006. Prior to the 2007 GPIF target filings, the Commission should conduct a staff workshop to consider a numerical method for calculating FPL’s and Progress’s EAF ranges. (Matlock)

Parties Positions:

FPL: OPC’s “dead band” proposal should not be approved, for the reasons stated in FPL’s position on Issue 21. If the Commission were nonetheless to approve that proposal, it should be implemented only prospectively, such that all unit performance through the end of 2006 would be rewarded and penalized in accordance with the existing GPIF procedures and using the previously established targets and ranges. (SONNELITTER)

GULF: No. The “dead band” amendment to the GPIF mechanism should not be applied for the current year. The “dead band” amendment to the GPIF mechanism should not be implemented by the Commission. (Noack)

PEF: No. The rewards or penalties calculated in the 2007 GPIF True Up are based on GPIF Targets that were set in 2005 for the calendar year of 2006. It would be inappropriate to apply a different methodology than was in effect at the time the Targets were approved. Should the Commission approve a “dead band” amendment to the GPIF mechanism, such changes should only go into effect for subsequent Target setting. For instance, if a “dead band” amendment was approved by the commission prior to or in conjunction with approving 2007 GPIF Targets, they would then take effect with the 2008 True Up, as these calculations would be the first rewards or penalties based on 2007 actual data. (Oliver)

TECO: No. Any amendment to the GPIF mechanism implemented by the Commission should be applied commencing January 1, 2008. (Witness: Smother man)

AARP: Agree with OPC.

FEA: No position.

FIPUG: Yes.

FRF: Agree with OPC.

White Spurs.: Agree with OPC.

Docket No. 060001-EI
Date: December 1, 2006

AG: Agree with OPC.

OPC: Yes.

Staff Analysis: The next period for which GPIF targets and ranges will be calculated will be 2008. Order Nos. 9558 and 10168 describe the method for translating the target EAF and heat rate ranges to points ranges. (Order No. 9558, pg 25, Order No. 10168, Sheet 3.503) Thus, the magnitudes of the ranges about the targets affect the magnitudes of the GPIF point ranges.

Order No. 10168 describes the methods used by the utilities to calculate the ranges about the targets. (Order No. 10168, Sheets 4.105, 4.107, 4.209, 4.212-4.213, 4.304, 4.307, 4.404, and 4.406) The method varies among the utilities. Some of the methods for calculating EAF ranges are not stated in deterministic terms. Basically, for Progress and FPL, the order describes the EAF ranges as being proportional to the variability of the historical EAF's.

Before adopting the proposed modification to the method of calculating rewards and penalties, staff recommends that the Commission conduct a staff workshop to consider methods for calculating EAF ranges for FPL and Progress. Otherwise, the EAF ranges accompanying the 2008 targets could be made smaller than those accompanying the targets through 2007. This would offset most of the desired effect of the dead band. These two changes to the "status quo" are necessary to ensure that the dead band works as proposed by Witness Ross.

Docket No. 060001-EI
Date: December 1, 2006

Issue A: Should this docket be closed?

Recommendation: This docket is an ongoing docket and should remain open. (Bennett)

Staff Analysis: This docket is an ongoing docket and should remain open. (Bennett)