

REDACTED

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

In re: Fuel and Purchased Power)	DOCKET NO. 110001-EI
Cost Recovery Clause with)	FILED: APRIL 1, 2011
Generating Performance Incentive)	
Factor)	

REDACTED

TAMPA ELECTRIC COMPANY'S

FUEL PROCUREMENT AND WHOLESALE POWER PURCHASES

RISK MANAGEMENT REPORT

2010

COM _____
APA _____
ECR _____
GCL _____
RAD _____
SSC _____
ADM _____
OPC _____
CLK _____

DOCUMENT NUMBER-DATE
02187 APR-1 =
 FPSC-COMMISSION CLERK

REDACTED

**Annual Report
2010 Risk Management Activities**

Tampa Electric's Risk Management Plan identified the following objectives:

- **Qualitative Objectives**
Tampa Electric's primary goal in managing risk associated with fuel or power purchases focuses on minimizing supply risk to ensure reliability of electric service to its customers at a reasonable price. To the extent that price risk can be mitigated without compromising supply reliability or imposing unreasonable costs on its customers, Tampa Electric is committed to executing strategies to accomplish its risk management goal.
- **Quantitative Objectives**
Tampa Electric's quantitative objective is to prudently manage its fuel and wholesale energy procurement activities so as to minimize the variance from projected expenditures while taking advantage of cost-saving opportunities that do not result in increased supply risk. Tampa Electric has established a portfolio of fuel and purchased power products with creditworthy counterparties for known volumes and prices.

2010 Risk Management Activities

The company's activities in 2010 that supported the objectives listed above are described in the following section.

- **Coal Purchases**
Tampa Electric maintains a portfolio of short-term (also called spot market), medium-term and long-term coal contracts with the goal of minimizing fuel costs and price risk while maintaining reliability of supply. The company procured all of its 2010 coal needs from suppliers with known, established pricing. Thus, the cost for the commodity was known. Tampa Electric continued to monitor deliveries and volume commitments in contracts as the pricing in the coal market changed. Tampa Electric takes advantage of favorable spot market pricing when the coal supply is needed. Coal was used to produce approximately 56 percent of the electricity the company generated in 2010.
- **Coal Risk Management Activities**
Tampa Electric's long-established policy of using physical hedges within its portfolio of different term coal supply contracts continued to help protect ratepayers from coal price volatility.

➤ **Natural Gas Purchases**

In 2010, approximately 44 percent of the electricity Tampa Electric generated was produced using natural gas. Tampa Electric's risk management strategy continues to focus on supply reliability and price volatility reduction. The components critical to the success of the natural gas purchasing strategy are as follows:

- Execution of the natural gas hedge plan approved by the Risk Authorizing Committee
- Maintaining liquidity by contracting with numerous qualified counterparties
- Time horizon for natural gas hedging activity that allows the company to hedge natural gas prices into the future
- Maintaining a minimum and maximum hedge volume percentage by month into the future
- Maintaining physical natural gas storage capacity near Mobile Bay, Alabama
- Diversifying interstate pipeline receipt points
- Expanding access to additional interstate pipelines
- Maintaining databases and reports to monitor activity
- Maintaining coordination between power plant operations and natural gas scheduling.
- Maintaining separation of duties and installation of controls consistent with current industry practices

➤ **Natural Gas Hedging Activities**

Natural gas prices historically have been more volatile than coal prices. Natural gas prices are more volatile due to the significant variations in natural gas consumption by natural gas fired power plants that increase and decrease generation to follow changes in demand. Additionally, hurricane activity and other weather-related production reductions or demand increases have a significant impact on the natural gas market. Therefore, Tampa Electric continued to use financial instruments to hedge the price of a portion of the natural gas burned in 2010 to reduce customers' exposure to the volatility of natural gas prices. Tampa Electric used floating price to fixed price swaps to hedge natural gas prices. The costs associated with these instruments are embedded in the price of the instruments and are included in the fuel commodity costs reported by the company. The hedges are described in the following table.

Tampa Electric
 2010 Natural Gas Hedging Activity True-Up

	Type of Hedge	Mark-to-Market Saving/(Loss)	Hedged Volume (MMBTU)	Consumption (MMBTU)	Percent Hedged	Budget Price (\$)	Hedge Price (\$)	Settle Price (\$)
January	Swaps	(4,236,240)		6,279,331				5.81
February	Swaps	(4,894,900)		5,552,378				5.27
March	Swaps	(5,526,580)		3,457,509				4.82
April	Swaps	(6,626,300)		4,822,245				3.84
May	Swaps	(6,343,380)		6,440,429				4.27
June	Swaps	(6,789,150)		6,268,450				4.16
July	Swaps	(6,010,740)		5,678,013				4.72
August	Swaps	(4,255,640)		6,296,163				4.77
September	Swaps	(8,232,720)		6,191,941				3.65
October	Swaps	(6,242,450)		5,105,134				3.84
November	Swaps	(4,857,010)		2,457,708				3.29
December	Swaps	(3,825,600)		4,466,039				4.27
Total		(67,840,710)		63,015,339				

Consistent with Tampa Electric's non-speculative risk management plan objective, Tampa Electric's natural gas hedging plan provided price stability and certainty during 2010. The losses for 2010 were driven primarily by the supply surplus due to the lower demand caused by the recession and the higher supply from non-conventional production, shale gas.

To enhance its physical reliability of gas supply, Tampa Electric has increased its natural gas storage capabilities since summer 2005, in 2010 the total storage capacity increased to 1,200,000 MMBtu. The storage provides Tampa Electric with improved access to "intraday" natural gas when an operational need arises, provides improved hurricane coverage, and can be used to cost-effectively manage swings in gas supply needs during extreme weather conditions, weekends and holidays.

Tampa Electric also continues to improve its physical access to natural gas supply by diversifying its receipt points along the Gulf Coast and other areas when opportunities arise.

In summary, financial hedging activities for natural gas resulted in a net loss of approximately \$68 million in 2010; however, Tampa Electric was successful in reducing price uncertainty and maintaining fuel supply reliability for customers for both its physical and financial hedges.

2010 Market Pricing

Tampa Electric provides a comparison of 2010 fuel prices to the market price for the respective commodity in the following section.

> **Coal**

Coal is a commodity with a great range of potential quality characteristics. Market indexes provide a guide to current market pricing but are not specific enough to accurately demonstrate the market price of a particular coal. Market prices for coal are most accurately determined by competitive bid solicitations that specify the required coal quality or characteristics. With the exception of purchases for reliability reasons, short-term purchases for changing plant operation needs and spot market purchases to take advantage of favorable pricing, Tampa Electric purchases coal at prices determined by competitive bid solicitations; therefore, the company's purchases are at market. A comparison of coal contract prices for 2010 to the average acceptable bid price or index price is provided in the following table. Unless otherwise stated, the prices represent the market at the time each contract was entered into and are not representative of today's market. Any comparison to current market prices overlooks the market conditions that existed at the time the coal was procured.

**Tampa Electric
 Coal Contract to Market Indicator Price Comparisons**

Supplier (Mine)	Contract (\$ / MMBtu)	Market Indicator (\$ / MMBtu)	Difference	Market Indicator Source	Note
Knight Hawk		3.07		GEN-2009-01 December 2007	1
Knight Hawk		3.07		GEN-2009-01 December 2007	1
TCP		2.64		PC-2010-PC	1
Valero		2.64		PC-2010-PC	1, 2
Valero		3.12		Argus PC Monthly June 2010	2
Glencore		4.18		GEN-2010-01	1
Ken American		4.53		Gen-2009-02 June 2008	1
Allied		2.47		Gen-2008-SP-01 Sept 2007	4
Allied		3.08		ICAP United, Inc - Coal 6/24/09	5
American Coal		3.00		GEN-2009-01 December 2007	1
Coal Sales		1.94		Gen 2005-2014 Solicitation	1
Eastern Coal and Coke		3.72		Coal Daily pricing 5/4/2010	3
Emerald		4.53		ICAP United, Inc - Coal 12/15/10	6
Progress		4.46		BTU Swap will replace Progress 4Q 2011	7

Notes:

The contract \$/MMBtu refers to the initial price of the contract at its inception. This price could be subject to escalation per the terms of the contract. All prices are determined on a fully delivered basis. Index values have also been calculated on a delivered basis for comparison purposes.

1. The bid solicitation price is the average price submitted of all acceptable coal bids.
2. Petroleum Coke Price index: PACE Petroleum Coke monthly and or Argus Petroleum Coke monthly Green Coke, Gulf Coast/Caribbean, Average Price, Below 50 Hargrove Grindability Index.
3. Pricing based on Argus Coal Daily coal price index.
4. Replacement coal volume for Phoenix-08SP1-09 that was not shipped.
5. Call / put option entered into in June 2009 - Utilized June 24, 2009 ICAP.
6. Spot purchase entered into December 2010 - Utilized December 15, 2010 ICAP.
7. GFI forecasted pricing. Illinois basin pricing 11,500, 5.0 S02, delivered to Davant, LA.

- **Natural Gas**

Tampa Electric purchases natural gas at prices that are set by published indexes that reflect the market price. Most of the monthly baseload gas is purchased at a price relative to the New York Mercantile Exchange natural gas futures last day settlement price. Tampa Electric purchases additional baseload gas at monthly index prices published in *Inside FERC, Gas Market Report*. Tampa Electric uses the indexes representing market prices for natural gas on the Gulf Coast that can be transported to Tampa Electric's service area: Henry Hub, Mobile Bay, or Florida Gas Transmission ("FGT") Zone 1, Zone 2 or Zone 3. For daily and short-term natural gas, Tampa Electric typically purchases natural gas based on the FGT index price published in *Gas Daily*. In rare instances, Tampa Electric also purchases small volumes of spot natural gas needed for short durations at fixed prices. Since the price of natural gas Tampa Electric purchases is based upon a published market index, the company's natural gas purchases are at market.
- **No. 2 Oil**

Tampa Electric purchases No. 2 oil for combustion turbines at Polk Station and for Big Bend Station startup. The purchase price is based upon the daily index price published in Platt's *Oilgram* for Gulf Coast Waterborne spot purchases of low sulfur No. 2 oil. Since the price is determined by the published market index, the price paid by Tampa Electric is at market.
- **No. 6 Oil**

Tampa Electric no longer purchases No. 6 oil for Phillips Station. Phillips Station was placed on long term standby in September 2009.
- **Propane**

Tampa Electric purchases propane for Polk Unit No. 1. The purchase price is based upon the average of daily index prices published by Oil Price Information Service at Mont Belvieu, the primary propane hub for the southern United States. Since the price is determined by the published market index, the price paid by Tampa Electric is at market.