



REDACTED

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 070001-EI

IN RE: FUEL & PURCHASED POWER COST RECOVERY

AND

CAPACITY COST RECOVERY

PROJECTIONS

JANUARY 2008 THROUGH DECEMBER 2008

TESTIMONY AND EXHIBIT

OF

JOANN T. WEHLE

- CMP _____
- COM 5 _____
- CTR 1 _____
- ECR 1 _____
- GCL 1 _____
- OPC _____
- RCA _____
- SCR _____
- SGA _____
- SEC _____
- OTH _____

DOCUMENT NO. DATE

07994-07 9/4/07

FPSC - COMMISSION CLERK

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **PREPARED DIRECT TESTIMONY**

3 **OF**

4 **JOANN T. WEHLE**

5
6 **Q.** Please state your name, address, occupation and employer.

7
8 **A.** My name is Joann T. Wehle. My business address is 702 N.
9 Franklin Street, Tampa, Florida 33602. I am employed by
10 Tampa Electric Company ("Tampa Electric" or "company") as
11 Director, Wholesale Marketing & Fuels.

12
13 **Q.** Please provide a brief outline of your educational background
14 and business experience.

15
16 **A.** I received a Bachelor of Business Administration Degree in
17 Accounting in 1985 from St. Mary's College in Notre Dame,
18 Indiana. I am a CPA in the State of Florida and worked in
19 several accounting positions prior to joining Tampa Electric.
20 I began my career with Tampa Electric in 1990 as an auditor
21 in the Audit Services Department. I became Senior Contracts
22 Administrator, Fuels in 1995. In 1999, I was promoted to
23 Director, Audit Services and subsequently rejoined the Fuels
24 Department as Director in April 2001. I became Director,
25 Wholesale Marketing and Fuels in August 2002. I am

1 responsible for managing Tampa Electric's wholesale energy
2 marketing and fuel-related activities.

3
4 **Q.** Please state the purpose of your testimony.

5
6 **A.** The purpose of my testimony is to discuss Tampa Electric's
7 fuel mix, fuel price forecasts, potential impacts to fuel
8 prices, and the company's fuel procurement strategies. I
9 will address steps Tampa Electric takes to manage fuel supply
10 reliability and price volatility and describe projected
11 hedging activities. I also sponsor Tampa Electric's 2008
12 risk management plan submitted concurrently in this docket.
13 Finally, I will present the calculation of waterborne
14 transportation costs submitted for recovery.

15
16 **Q.** Have you previously testified before this Commission?

17
18 **A.** Yes. I have testified or filed testimony before this
19 Commission in several dockets, including Docket No. 011605-EI
20 and 031033-EI as well as the annual fuel and purchased cost
21 recovery dockets from 2001 through 2007. I have also recently
22 filed testimony in Tampa Electric's petition to determine
23 need for the Polk Unit 6 electrical power plant, Docket No.
24 070467-EI. My testimony in these dockets described the
25 appropriateness and prudence of Tampa Electric's fuel

1 procurement activities, fuel supply risk management, fuel
2 price volatility hedging activities, and fuel transportation
3 costs.

4
5 **Q.** Have you prepared an exhibit in support of your testimony?

6
7 **A.** Yes. Exhibit No. ____ (JTW-2) describes the calculation of
8 the 2006 waterborne transportation costs disallowance.

9
10 **2008 Fuel Mix and Procurement Strategies**

11 **Q.** What fuels will Tampa Electric's generating stations use in
12 2008?

13
14 **A.** In 2008, Tampa Electric expects its fuel mix to be comparable
15 to 2007. In 2008, natural gas-fired and coal-fired
16 generation is expected to be 45 percent and 55 percent of
17 total generation, respectively. Generation from No. 2 oil
18 and No. 6 oil is less than one percent of the total
19 generation.

20
21 **Q.** How does Tampa Electric's natural gas procurement and
22 transportation strategy achieve competitive natural gas
23 purchase prices for long- and short-term deliveries?

24
25 **A.** Tampa Electric uses a portfolio approach to natural gas

1 procurement. The company's portfolio consists of a blend of
2 pre-arranged base load, intermediate and swing supply along
3 with daily spot purchases. The contracts have various time
4 lengths to help secure needed supply at competitive prices
5 and maintain the ability to take advantage of favorable
6 natural gas price movements. Tampa Electric trades for
7 physical natural gas supply with many approved
8 counterparties, enhancing liquidity and diversification of
9 its natural gas supply portfolio. The natural gas prices are
10 based on monthly and daily price indexes, increasing
11 portfolio diversification.

12
13 Tampa Electric improved the reliability of the physical
14 delivery of natural gas to its power plants by diversifying
15 its pipeline transportation assets, including receipt points,
16 and utilizing pipeline and storage tools to enhance access to
17 natural gas supply during hurricanes or other events that
18 constrain supply. On a daily basis, Tampa Electric strives
19 to obtain reliable supplies of natural gas at favorable
20 prices in order to minimize costs to its customers.
21 Additionally, Tampa Electric's risk management activities
22 improve the company's natural gas procurement activities by
23 reducing natural gas price volatility.

24
25 Q. Please describe Tampa Electric's diversified natural gas

1 transportation arrangements.

2
3 **A.** Tampa Electric currently receives natural gas transportation
4 to its plants on the Florida Gas Transmission ("FGT")
5 pipeline. The company diversified its transportation assets
6 when it entered into a cost-effective contract with
7 Gulfstream Natural Gas Pipeline, LLC ("Gulfstream") that will
8 provide firm natural gas transportation directly to Tampa
9 Electric's H. L. Culbreath Bayside Station ("Bayside
10 Station") from Manatee County, via a 28-mile lateral
11 pipeline. Tampa Electric anticipates completion of the
12 lateral pipeline in early 2008. The transportation agreement
13 with Gulfstream adds a second pipeline to Tampa Electric's
14 capacity portfolio and improves the company's ability to meet
15 natural gas hourly and daily demands.

16
17 **Q.** What actions does Tampa Electric take to enhance the
18 reliability of its natural gas supply?

19
20 **A.** Tampa Electric has maintained natural gas storage capacity
21 with Bay Gas Storage near Mobile, Alabama since 2005. When
22 Bay Gas Storage completes expansion of its facilities in
23 2008, Tampa Electric will increase its storage capacity to
24 750,000 MMBtu, which provides enhanced access to natural gas
25 in the event of severe weather or other events that disrupt

1 supply. In addition to storage, Tampa Electric maintains
2 diversified natural gas supply receipt points in FGT Zones 1,
3 2 and 3. Diverse receipt points reduce the company's
4 vulnerability to hurricane impacts in FGT Zone 3 and provide
5 access to lower priced gas supply.
6

7 **Q.** What is Tampa Electric's coal procurement strategy?
8

9 **A.** Tampa Electric's two coal-fired plants are Big Bend Station
10 and Polk Station. Big Bend Station is a fully scrubbed plant
11 whose design fuel is high-sulfur Illinois Basin coal. Polk
12 Station is an integrated gasification combined cycle plant
13 currently burning a mix of coal, petroleum coke, and lower
14 sulfur coal. The plants have varying operational and
15 environmental restrictions and require fuel with custom
16 quality characteristics such as sulfur content, Btu/lb, ash,
17 fusion temperature and chlorine content. Since coal is not a
18 homogenous product, fuel selection is based on these unique
19 characteristics, price, availability, and creditworthiness of
20 the supplier.
21

22 Tampa Electric maintains a portfolio of bilateral, long-,
23 intermediate-, and short-term contracts for coal supply.
24 Tampa Electric monitors the market to obtain the most
25 favorable prices from sources that meet the needs of the

1 generating stations. The use of daily and weekly
2 publications, independent research analyses from industry
3 experts, discussions with suppliers and coal solicitations
4 aid in market monitoring and in shaping the company's coal
5 procurement strategy to reflect current market conditions.
6 This allows for stable supply sources while providing
7 flexibility to take advantage of favorable spot market
8 opportunities. The company's efforts to obtain the most
9 favorable coal prices directly benefit its customers by
10 displacing higher cost options.

11
12 **Q.** Has Tampa Electric entered into coal and natural gas supply
13 transactions for 2008 delivery?

14
15 **A.** Yes, it has. To mitigate price volatility and ensure
16 reliability of supply, Tampa Electric has contracted for a
17 significant portion of its expected coal needs through
18 bilateral agreements with coal suppliers. Approximately two
19 thirds of the company's expected 2008 coal requirements are
20 already under contract. Tampa Electric has also entered into
21 contracts for approximately [REDACTED] percent of the company's
22 expected natural gas needs for the winter of 2007 and through
23 2008.

24
25 **Q.** Has Tampa Electric reasonably managed its fuel procurement

1 practices for the benefit of its retail customers?
2

3 **A.** Yes. Tampa Electric diligently manages its mix of long-,
4 intermediate-, and short-term purchases of fuel in a manner
5 designed to reduce overall fuel costs while maintaining
6 electric service reliability. The company monitors and
7 adjusts fuel volumes it accepts within contractually allowed
8 maximum and minimum amounts in accordance with the price of
9 fuel available on the spot market, to take advantage of the
10 lowest available prices. The company's fuel activities and
11 transactions are reviewed and audited on a recurring basis by
12 the Commission. In addition, the company monitors its rights
13 under contracts with fuel suppliers to detect and prevent any
14 breach of those rights. Tampa Electric continually strives
15 to improve its knowledge of fuel markets and to take
16 advantage of opportunities to minimize the costs of fuel.
17

18 **Projected 2008 Fuel Prices**

19 **Q.** How does Tampa Electric project fuel prices?
20

21 **A.** Tampa Electric reviews fuel price forecasts from sources
22 widely used in the industry, including PIRA Energy Group,
23 Hill & Associates, the Energy Information Administration, the
24 New York Mercantile Exchange ("NYMEX") and other energy
25 market information sources. Futures prices for energy

1 commodities, as traded on the NYMEX, blended with current
2 PIRA price forecasts form the basis of the natural gas, No. 6
3 oil and No. 2 oil price forecasts. The commodity price
4 projections are adjusted to incorporate expected
5 transportation costs and quality adjustments. These
6 adjustments are specific to the power plants to which the
7 fuel will be delivered and the locations from which it is
8 transported.

9
10 Coal prices and coal transportation prices are projected
11 using information from industry-recognized consultants and
12 are specific to the particular quality and mined location of
13 coal utilized by Tampa Electric's Big Bend Station and Polk
14 Unit 1. Final as-burned prices are derived using expected
15 commodity prices, associated transportation costs, inventory
16 effects, and analysis performed on coal inventory.

17
18 **Q.** How do the 2008 projected fuel prices compare to the fuel
19 prices projected for 2007?

20
21 **A.** The entire industry, including Tampa Electric, has
22 experienced rising fuel prices since 2003, and projected fuel
23 prices for 2008 are expected to remain at these levels due to
24 the demand on natural resources. The global economy and the
25 increasing industrialization of countries like China have

1 affected the global balance of natural resources such as
2 natural gas, oil, and coal. In particular, crude oil prices
3 have soared to well over \$70 per barrel, due to factors such
4 as the turmoil in the Middle East, fears of additional
5 hurricane activity near the U.S. coastline and growth in
6 demand for refined products. Similarly, the transportation
7 costs for commodities have increased as the fuel used in
8 transportation increased in price.

9
10 **Q.** What are the market drivers of the expected 2008 increase in
11 the price of natural gas?

12
13 **A.** Of the fuels utilized by Tampa Electric, natural gas has
14 experienced the greatest increase in price over the last
15 several years. In addition to price pressures from natural
16 gas and crude oil, the market drivers include increased
17 demand from natural-gas fired generation, declining natural
18 gas production in North America, delayed liquefied natural
19 gas projects, concerns about the adequacy of natural gas in
20 storage, and concerns about production losses due to tropical
21 storm activity. A return to a normal or more active storm
22 season in the summer of 2007 coupled with normal winter
23 weather in 2007/2008 is expected to increase natural gas
24 prices in 2008 compared to 2007.

25

1 Q. What are the market drivers of the increase in the price of
2 coal?

3
4 A. Coal prices correlate with the prices of other fuels since
5 coal mining utilizes petroleum products, steel, and lumber in
6 its production processes; therefore, coal prices have
7 increased in conjunction with increases in the prices of
8 these products and other fuels. Costs of SO₂ allowances also
9 contribute to the higher prices for lower sulfur coals and
10 coal in general. Thus, Tampa Electric expects higher coal
11 prices to continue through 2008. Fortunately, Tampa
12 Electric's use of high sulfur coal from the Illinois Basin in
13 its scrubbed units at Big Bend has shielded Tampa Electric
14 from some of the extreme price volatility experienced in low
15 sulfur coal prices.

16
17 Q. Did Tampa Electric consider the impact of higher than
18 expected or lower than expected natural gas prices?

19
20 A. Yes. Tampa Electric has provided an analysis in which 2008
21 natural gas prices are 35 percent higher or lower than the
22 base forecast. The causes of potential price uncertainty
23 include weather, political turmoil, global economics,
24 commodity production, and transportation issues.

25

1 **Risk Management Activities**

2 **Q.** Please describe Tampa Electric's risk management activities.

3
4 **A.** Tampa Electric complies with its risk management plan as
5 approved by the company's Risk Authorizing Committee. Tampa
6 Electric's plan is described in detail in the Risk Management
7 plan filed simultaneously in this docket.

8
9 **Q.** Does Tampa Electric's risk management strategy help to
10 mitigate natural gas price risk?

11
12 **A.** Yes. To help protect customers from price volatility, Tampa
13 Electric may purchase over-the-counter natural gas swaps,
14 options and collars. A swap is a financial derivative that
15 provides a "fixed for floating" position. Tampa Electric,
16 the buyer pays a fixed price for the natural gas, which has a
17 floating value until cash settlement. Swaps allow Tampa
18 Electric to lock in known natural gas prices and avoid upward
19 price volatility. The transaction costs of swaps are
20 embedded in the price of the commodity.

21
22 Options give Tampa Electric the right, but not the
23 obligation, to buy (call) or sell (put) natural gas at a
24 predetermined price for a given future month. Tampa Electric
25 pays a premium at the time of the option purchase for this

1 right.

2
3 Collars are combinations of call options (caps) and put
4 options (floors) that limit prices within a certain range.
5 An option is the right, but not the obligation, to buy (call)
6 or sell (put) natural gas at a pre-determined price. With a
7 collar, the company knows that its future prices will remain
8 within the predetermined boundaries established by the call
9 and put options.

10
11 **Q.** Has Tampa Electric used financial hedging in an effort to
12 help mitigate the price volatility of its 2007 and 2008
13 natural gas requirements?

14
15 **A.** Yes. Tampa Electric has hedged a significant portion of its
16 2007 natural gas supply needs and a portion of its expected
17 2008 natural gas supply needs. Tampa Electric will continue
18 to take advantage of available natural gas hedging
19 opportunities in an effort to benefit its customers, while
20 complying with the company's approved Risk Management Plan.
21 The current market position for natural gas hedges is
22 provided in the Risk Management Plan.

23
24 **Q.** Are the company's strategies adequate for mitigating price
25 risk for Tampa Electric's 2007 and 2008 natural gas

1 purchases?

2
3 **A.** Yes, the company's strategies are adequate for mitigating
4 price risk for Tampa Electric's natural gas purchases. Tampa
5 Electric's strategies balance the desire for reduced price
6 volatility and reasonable cost with the uncertainty of
7 natural gas volumes. These strategies are described in
8 detail in Tampa Electric's Risk Management Plan.

9
10 **Q.** Have recent increases in the market price of natural gas
11 affected the percentage of Tampa Electric's natural gas
12 requirements that the company has hedged or plans to hedge?

13
14 **A.** No. The volume hedged is driven primarily by expected
15 natural gas consumption levels and the time until that
16 natural gas is needed. Based on those two parameters, the
17 amount hedged is maintained within a prescribed percentage
18 range. Price is not a component of the current plan since
19 the objective is price volatility reduction, not price
20 speculation.

21
22 **Q.** Were Tampa Electric's efforts through August 2007 to mitigate
23 price volatility through its non-speculative hedging program
24 prudent?

1 **A.** Yes. Tampa Electric has executed hedges according to the
2 risk management plan filed with this Commission, which was
3 approved by the company's Risk Authorizing Committee.
4

5 **Coal Transportation Costs**

6 **Q.** Did Tampa Electric calculate the waterborne transportation
7 costs submitted for cost recovery in accordance with the
8 Commission's Order No. PSC-04-0999-FOF-EI ("Order No. 04-
9 0999"), issued in Docket No. 031033-EI on October 12, 2004?
10

11 **A.** Yes. The waterborne transportation costs that Tampa Electric
12 is seeking to recover are the adjusted rates per ton for each
13 upriver terminal as well as the adjusted ocean barge
14 transportation rate. The company calculates the adjusted
15 rates as described in Order No. 04-0999. The river rate is
16 adjusted using the following formula:
17

18
$$\frac{\text{(Weighted average rate per ton for all upriver terminals - \$1/ton)}}{\text{Weighted average rate per ton for all upriver terminals}} \times \text{Contract rate for specific upriver terminal}$$

19

20
21 The ocean rate is reduced by [REDACTED] per ton for shipments from
22 the Davant, Louisiana terminal and [REDACTED] per ton for
23 petroleum coke shipments from Texas, as prescribed by the
24 Commission order.
25

1 For 2006, Tampa Electric's adjustment to its total waterborne
2 transportation costs totaled \$15,314,802. The total 2006
3 adjustment recorded in Tampa Electric's final true-up filing,
4 submitted in this docket on March 1, 2007, was calculated
5 using the actual tons of coal and petroleum coke shipped in
6 2006 and the methodology required by Order No. 04-9999.
7 These calculations are shown in Exhibit No. ____ (JTW-2),
8 Document No. 1. Therefore, Tampa Electric's 2006 adjusted
9 coal transportation costs are appropriate for recovery
10 through the Fuel and Purchased Power Cost Recovery Clause.

11
12 Likewise, the expected 2007 and 2008 waterborne
13 transportation costs have been adjusted using this same
14 methodology according to Order No. 04-0999 and will be
15 revised to reflect the actual tons shipped and associated
16 calculated disallowances as part of the normal true-up
17 process. Accordingly, it is also appropriate for Tampa
18 Electric to recover its allowable 2007 and 2008 projected
19 transportation expenses included in the fuel clause for coal
20 transportation.

21
22 **Q.** Does this conclude your testimony?

23
24 **A.** Yes, it does.

25

TAMPA ELECTRIC COMPANY
DOCKET NO. 070001-EI
FILED: 9/4/07

EXHIBIT TO THE TESTIMONY OF
JOANN T. WEHLE

2006 WATERBORNE TRANSPORTATION COST ADJUSTMENT

January - December 2006	(A)	(B)	(C)	(D)	(A*D)	(B*D)	(C*D)
	Contract	Adjusted	Disallowance	Total	Contract	Adjusted	Disallowed
	\$/Ton ^{(1) (3)}	\$/Ton ⁽²⁾	\$/Ton	Tons	Total	Total	Total
Inland River Docks							
Pet Coke Refinery (M.P. 140)					\$ 827,493	\$ 716,288	\$ 111,205
Chester Dock					5,740,957	4,957,790	783,167
Overland/Camp					-	-	-
Hamilton					-	-	-
Empire Dock					-	-	-
Cora, Non-Zeigler					4,097,454	3,539,233	558,221
Yankeetown					-	-	-
Mount Vernon					4,004,554	3,458,478	546,076
Cook					1,026,926	887,827	139,099
Henderson River Port					-	-	-
Rigsby & Barnard (Arclar)					-	-	-
Patriot					277,443	239,733	37,711
Owensboro					-	-	-
New Hope					-	-	-
Dekoven					2,706,855	2,337,920	368,934
Jefferson					-	-	-
Powhatan					-	-	-
Caseyville					78,530	67,811	10,719
S. Indiana/Evansville					181,006	156,403	24,603
Pyramid					-	-	-
Ken Mine					-	-	-
GRT					-	-	-
Kentucky Lakes Dock					-	-	-
Transcontinental (TTI)					-	-	-
Sebree					2,785,687	2,406,274	379,413
Amon					932,662	805,529	127,134
Shawneetown					7,702,226	6,650,380	1,051,846
Total River					\$ 30,361,792	\$ 26,223,666	\$ 4,138,126
Ocean							
Coal					37,008,248	25,831,571	11,176,676
Petcoke from Texas					-	-	-
Total Ocean					\$ 37,008,248	\$ 25,831,571	\$ 11,176,676
						Total	\$ 15,314,802

- 1 Contract rate per contract signed with TECO Transport.
- 2 Adjusted rate based on methodology set forth in Order No. PSC-04-0999-FOF-EI, which takes the weighted average rate for all upriver terminals minus \$1 and divides it by the weighted average rate of all upriver terminals multiplied by the contract rate for that specific upriver terminal. Ocean rate based on the aforementioned Order.
- 3 Contract rate subject to quarterly escalation provisions in the contract. Therefore, ratio between total contract amount and adjustment will change moving forward.