



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 040001-EI

IN RE: FUEL & PURCHASED POWER COST RECOVERY

AND

CAPACITY COST RECOVERY

PROJECTIONS

JANUARY 2005 THROUGH DECEMBER 2005

TESTIMONY AND EXHIBIT

OF

JOANN T. WEHLE

REDACTED VERSION

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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
14 background and business experience.

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

1 Fuels in August 2003. I am responsible for managing
2 Tampa Electric's wholesale energy marketing and fuel-
3 related activities.

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

6
7 **A.** The purpose of my testimony is to report to the Florida
8 Public Service Commission ("Commission") the 2003 actual
9 costs of Tampa Electric's affiliated coal transportation
10 transactions compared to the benchmark prices calculated
11 in accordance with Order No. 20298. My report will show
12 that the 2003 prices paid by Tampa Electric to its
13 affiliated company, TECO Transport, are reasonable and
14 prudent. In addition, I will discuss the change in Tampa
15 Electric's fuel mix, the company's natural gas
16 strategies, fuel price forecasts, and potential impacts
17 of the high and low fuel forecasts. Finally, I will
18 address steps Tampa Electric has taken to manage fuel
19 prices and supply volatility and describe projected
20 hedging activities and incremental operations and
21 maintenance (O&M) costs for these activities.

22
23 **Q.** Have you previously filed testimony before this
24 Commission?

25

1 **A.** Yes. I filed testimony before this Commission in the
2 predecessors to this docket since 2001 and in Docket No.
3 011605-EI. I also testified before this Commission in
4 Docket Nos. 030001-EI and 031033-EI. My testimony in
5 these dockets described the appropriateness and prudence
6 of Tampa Electric's fuel procurement activities, fuel
7 supply risk management, fuel price volatility hedging
8 activities, and waterborne coal transportation costs.

9
10 **Q.** Have you prepared an exhibit in support of your
11 testimony?

12
13 **A.** Yes. Exhibit No. ____ (JTW-2), containing two documents,
14 was prepared under my direction and supervision.
15 Document No. 1 is furnished in support of the waterborne
16 transportation benchmark application, and Document No. 2
17 describes the calculation of the company's incremental
18 O&M hedging costs.

19
20 **Coal Transportation Costs**

21 **Q.** Were Tampa Electric's actual affiliated coal
22 transportation prices for 2003 at or below the
23 transportation benchmark established in Docket No.
24 870001-EI-A, Order No. 20298?

25

1 **A.** **Yes.** As shown on page 2 of Document No. 1 of my exhibit,
2 the affiliated coal transportation prices for 2003 were
3 at or below the appropriate benchmark calculations as
4 directed by Order No. 20298 of this Commission.
5 Accordingly, it is appropriate for Tampa Electric to
6 recover its transportation expenses included in the Fuel
7 and Purchased Power Cost Recovery Clause for 2003 coal
8 transportation.

9
10 **Q.** What coal transportation rates are reflected in Tampa
11 Electric's 2005 projected costs?

12
13 **A.** Tampa Electric utilized the waterborne coal
14 transportation rates of the contract that took effect on
15 January 1, 2004.

16
17 **2005 Fuel Mix and Procurement Strategies**

18 **Q.** Please describe any changes in the types and amounts of
19 fuel that will be used by Tampa Electric's generating
20 stations in 2005.

21
22 **A.** In 2004, Tampa Electric completed its transition from
23 burning predominantly coal to utilizing a mix of natural
24 gas and coal. As a result of the repowering of Gannon
25 Station, Tampa Electric's reliance on natural gas has

1 increased from three percent in 2002 to 39 percent of
2 projected natural gas-fired generation in 2004. In 2005,
3 natural gas-fired and coal-fired generation are expected
4 to be 41 percent and 58 percent of total generation,
5 respectively.

6
7 **Q.** How have Tampa Electric's activities and strategies
8 related to natural gas procurement and forecasting
9 changed now that natural gas-fired H. L. Culbreath
10 Bayside Station ("Bayside Station") has successfully
11 entered commercial service?

12
13 **A.** Tampa Electric continues to use a portfolio approach to
14 natural gas procurement. The company's portfolio is
15 comprised of long-term and spot resources to secure
16 needed supply and maintain the ability to take advantage
17 of favorable gas price movements. However, as the
18 company's fuel mix has changed to incorporate more
19 substantial volumes of natural gas, its focus on the
20 natural gas market has increased as part of **daily**
21 activities. Tampa Electric has increased the number of
22 counterparties it can trade with for both physical gas
23 and financial hedging products to provide flexibility in
24 the procurement strategy.

25

1 Q. Please describe Tampa Electric's hedging plan.

2

3 A. Tampa Electric has continued to refine its hedging plan
4 and strategies. Based on experience gained through the
5 addition of Bayside Station, the company updated and
6 enhanced the risk management plan, which was recently
7 presented and approved by the company's Risk Authorizing
8 Committee. Additionally, Tampa Electric implemented a
9 risk management software program that improved the
10 internal controls surrounding risk management activities
11 by providing more detailed and timely reporting of
12 hedging activities. The company's fuel procurement staff
13 also reviewed industry information services from
14 respected forecasting companies and selected the services
15 of PIRA Energy Consulting to assist with forecasting fuel
16 and energy market conditions. All of these activities
17 have enhanced the company's tools and strategies with a
18 focus on the natural gas market.

19

20 Q. How does Tampa Electric arrange for natural gas to be
21 delivered to its units?

22

23 A. Tampa Electric has a contract for firm natural gas
24 transportation. Additionally, the company evaluates the
25 market and expected unit operations and attempts to sell

1 any unused natural gas transportation capacity on a daily
2 basis, and the resulting savings are flowed back to
3 customers.

4
5 **Q.** What is Tampa Electric's coal procurement strategy?

6
7 **A.** Tampa Electric's two coal-fired plants are Big Bend
8 Station and Polk Station. Big Bend Station is a fully
9 scrubbed plant whose design fuel is high sulfur Illinois
10 Basin coal, and Polk Station is an integrated
11 gasification combined cycle plant that is currently
12 burning a mix of Illinois Basin coal, petroleum coke, and
13 lower sulfur coal. The plants have varying operations
14 and environmental restrictions and require fuel with
15 custom quality characteristics such as sulfur content,
16 BTU/lb, ash fusion temperature and chlorine content.
17 Since coal is not a homogenous product, fuel selection is
18 based on these unique factors and price, availability,
19 and creditworthiness of the supplier.

20
21 Tampa Electric maintains a portfolio of bi-lateral,
22 long-, medium-, and short-term contracts for coal supply.
23 This allows the company to maintain stable supply sources
24 while providing flexibility to take advantage of
25 favorable spot market opportunities. Tampa Electric

1 monitors the market to obtain the most favorable prices
2 from sources that meet the needs of the operating
3 stations. The use of daily and weekly publications,
4 independent research analyses from industry experts,
5 discussions with suppliers, and coal solicitations help
6 in market monitoring and in shaping the company's coal
7 procurement strategy to reflect current market
8 conditions.

9
10 **Q.** Has Tampa Electric entered into fuel supply transactions
11 for 2004 and 2005 delivery?

12
13 **A.** Yes, it has. To mitigate price volatility and ensure
14 reliability of supply, Tampa Electric has purchased the
15 majority of its expected coal needs for both years
16 through bilateral agreements with coal suppliers. Tampa
17 Electric has also entered into contracts for a portion of
18 the company's expected natural gas needs for the winter
19 of 2004 to 2005 and expects to contract for the remainder
20 of its supply needs within the next two months.

21
22 **Q.** Has Tampa Electric reasonably managed its fuel
23 procurement practices for the benefit of its retail
24 customers?

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

17

18 **Projected 2005 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
23 Consulting, Hill & Associates, the Energy Information
24 Administration, the New York Mercantile Exchange
25 ("NYMEX") and other energy consultants. Futures prices

1 for energy commodities, as traded on the NYMEX, are the
2 primary driver of the natural gas and No. 2 oil price
3 forecasts. The commodity price projections are then
4 adjusted to incorporate expected transportation costs and
5 quality adjustments. The transportation and quality
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
12 and are specific to the particular quality and location
13 of coal utilized by Tampa Electric's Big Bend Station and
14 Polk Unit 1. Final as-burned prices are derived by
15 adjusting for expected transportation costs, as well as
16 adjusting for costs associated with creating coal blends.

17
18 **Q.** How do the 2005 projected fuel prices compare to the fuel
19 prices projected for 2004?

20
21 **A.** Projected fuel prices for 2005 have increased for all
22 commodities. Tampa Electric began to see some increases
23 in late 2003, but did not experience dramatic increases
24 until 2004. The global economy and the increasing
25 industrialization of countries like China have affected

1 the price of natural resources such as natural gas, oil,
2 and coal to a large degree. In addition, the
3 transportation of these resources has been affected. The
4 demand for these commodities and others, such as steel,
5 has continued to exert upward pressure on these prices.
6 Crude oil prices have seen unprecedented high pricing
7 recently due to factors such as the turmoil in the Middle
8 East and issues related to the Russian oil market.

9
10 Natural gas prices have increased 16 percent since the
11 2004 projection was prepared. The market drivers of this
12 increase are the economic recovery for industries that
13 are dependent on natural gas use, lower hydroelectric
14 power output from the West, increased heating demand from
15 the most recent winter and declining natural gas
16 production in North America.

17
18 Coal prices are correlated with the prices of the other
19 fuels since coal mining utilizes petroleum products,
20 steel, and lumber in its production processes.
21 Therefore, coal prices have also increased. In addition,
22 more US domestic coal is being exported because of higher
23 demand in Europe and Asia. For all of these reasons,
24 Tampa Electric expects the higher prices to continue for
25 all fuels through 2005.

1 Q. Did Tampa Electric consider the impact of higher than
2 expected or lower than expected natural gas prices?

3

4 A. Yes. After reviewing the historical volatility in NYMEX
5 pricing and the implied volatility in natural gas
6 options, Tampa Electric has determined that actual prices
7 in 2005 could be higher or lower than the base forecast
8 by as much as 35 percent. Major fundamental or technical
9 changes, such as abnormal weather, political instability
10 or production shortages, will also dramatically affect
11 price volatility. In the event of a significant natural
12 gas price increase, the company evaluates potential lower
13 cost alternatives.

14

15 **Hedging Transactions and Related Expenses**

16 Q. Given the volatility of the natural gas commodity market,
17 has Tampa Electric entered into financial hedging
18 transactions in 2004 to mitigate the price volatility of
19 natural gas?

20

21 A. Yes. To protect customers from price risk, Tampa
22 Electric purchased over-the-counter natural gas swaps and
23 collars during 2004. A swap is a financial derivative
24 that provides a "fixed for floating" position. The buyer
25 (Tampa Electric) pays a fixed price for the natural gas,

1 which has a floating value until cash settlement at the
2 end of the month. The swaps allowed Tampa Electric to
3 lock in known natural gas prices and avoid upward price
4 volatility. The transaction costs of swaps are embedded
5 in the price of the commodity.

6
7 Collars are combinations of call options (caps) and put
8 options (floors) that collar prices within a certain
9 range. With a collar, the company knows that its future
10 prices will remain within the predetermined boundaries
11 established by the call and put options.

12
13 **Q.** Will Tampa Electric use financial hedging to mitigate the
14 price volatility of natural gas purchases in 2005?

15
16 **A.** Yes. Swaps are one of the hedging instruments Tampa
17 Electric plans to use during 2005. Other instruments
18 that Tampa Electric may use in 2005 are futures, options
19 and collars.

20
21 **Q.** Does Tampa Electric anticipate incurring incremental
22 O&M expenses related to initiating or maintaining its
23 non-speculative financial hedging program in 2005?

24
25 **A.** Yes. In Order No. PSC-02-1484-FOF-EI, issued October 30,

1 2003, the Commission authorized the recovery of
2 prudently-incurred incremental O&M expenses for the
3 purpose of initiating and/or maintaining a new or
4 expanded non-speculative financial and/or physical
5 hedging program designed to mitigate fuel and purchased
6 power price volatility for its retail customers. Tampa
7 Electric expects its 2005 total incremental hedging O&M
8 cost to be \$111,116. These incremental costs are
9 itemized in Document No. 2 of my exhibit. The company
10 **purchased** and implemented a software system to more
11 efficiently track, monitor and evaluate hedging
12 transactions in 2004. The annual license fee for this
13 software system is included in the calculation of 2005
14 incremental costs.

15
16 **Q.** What is Tampa Electric's appropriate base O&M expense
17 level used to calculate incremental hedging O&M expenses?
18

19 **A.** Tampa Electric's base level of hedging O&M expenses of
20 \$169,153 reflects the company's actual 2001 costs prior
21 to its implementation of a prudent financial hedging
22 program in 2002. The base level costs were audited by
23 the Commission Staff in Audit No. 02-340-2-1, in Docket
24 No. 030001-EI. Tampa Electric's expected 2005
25 incremental hedging O&M expenses shown in Document No. 2

1 of my exhibit are calculated using this audited base
2 level.

3

4 **Q.** Were Tampa Electric's efforts through July 31, 2004 to
5 mitigate price volatility through its non-speculative
6 hedging program prudent?

7

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

11

12 **Q.** Does this conclude your testimony?

13

14 **A.** Yes, it does.

15

16

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EXHIBIT TO THE TESTIMONY OF
JOANN WEHLE

DOCUMENT NO. 1

APPLICATION OF THE WATERBORNE
TRANSPORTATION COSTS BENCHMARK

2003 TRANSPORTATION BENCHMARK CALCULATION

Average Rail Mileage to Tampa	1,082	miles	(Note 1)
x Average of Lowest Two Publicly Available Florida Rail Rates	1.96	¢ / ton mile	(Note 2)
+ Costs of Privately Owned Rail Cars	\$ 1.75	per ton	(Note 3)
Transportation Benchmark for the Year Ended 12/31/03	\$ 22.96	per ton	(Note 4)

Notes

- 1/ Weighted average domestic rail miles from all Tampa Electric waterborne coal supplies to plants. Rail miles for imported coal sources are measured from port of entry.
- 2/ Cents per ton-mile for publicly available Florida utility rail coal transportation rates including discounts for volume and private rail cars. The current publicly available rail rates to Florida utilities on a cents per ton-mile basis for 2003 are as follows:
- | | | |
|-------------------------|---|------|
| JEA | ¢ | 2.55 |
| Orlando | ¢ | 2.07 |
| Lakeland | ¢ | 2.01 |
| Gainesville | ¢ | 1.91 |
| * Average of Lowest Two | ¢ | 1.96 |
- 3/ The cost of private rail cars was approved in the original stipulation as \$2.00 per ton. Subsequent negotiation between Tampa Electric and Public Service Commission Staff resulted in an agreed upon estimated cost of \$1.75 per ton.
- 4/ Calculated by multiplying average domestic rail mileage to Tampa by Florida rail coal market costs (cents per ton-mile), then adding the costs of privately-owned rail cars.

2003 TRANSPORTATION MARKET PRICE APPLICATION

Tampa Electric Weighted Average per ton Water Transportation Price from All Tampa Electric Coal Sources (██████████ divided by 4,816,698.19 tons)	██████████
Transportation Benchmark	\$22.96
Over/(Under) Benchmark	██████████
Total Tons Transported in 2003	4,816,698.19
Total Transportation Cost in 2003	██████████
Total Amount Allowable for Recovery Using Benchmark (\$22.96 x 4,816,698.19 tons)	\$110,591,390.44
Total Cost Over/(Under) Benchmark – 2003	██████████
Prior Year's Cumulative Benefit (1988-2002)	██████████
Net Benefit for 1988 – 2003	██████████

EXHIBIT TO THE TESTIMONY OF
JOANN WEHLE

DOCUMENT NO. 2

PROJECTED INCREMENTAL O&M HEDGING COSTS

**Tampa Electric Company
2005 Projected Incremental O&M Hedging Costs**

O&M Hedging Costs

Labor and related charges	\$ 203,767
Software system fees	60,110
Consulting and subscription fees	<u>16,392</u>
Total O&M Hedging Costs	\$ 280,269
Less Base Year O&M Hedging Costs	<u>169,153</u>
Incremental O&M Hedging Costs	\$ <u>111,116</u>