



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 010001-EI
IN RE: FUEL & PURCHASED POWER COST RECOVERY
AND
CAPACITY COST RECOVERY
PROJECTIONS
JANUARY 2002 THROUGH DECEMBER 2002
TESTIMONY
OF
W. LYNN BROWN

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FPSC-COMMISSION CLERK

BEFORE THE PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

W. LYNN BROWN

Q. Please state your name, address, occupation and employer.

A. My name is Lynn Brown. My business address is 702 North Franklin Street, Tampa, Florida 33602. I am employed by Tampa Electric Company ("Tampa Electric" or "company") as Director, Wholesale Marketing and Sales.

Q. Please provide a brief outline of your educational background and business experience.

A. I received a Bachelor degree in Electrical Engineering from Louisiana State University in 1972 and subsequently joined Tampa Electric. I held various engineering, operations and managerial positions in Energy Delivery from 1973 through 1997. I became Manager of Short Term Wholesale Trading in April 1997 and was promoted to Director, Wholesale Marketing and Sales in August of 1998 where I am responsible for short- and long-term wholesale power purchases and sales.

1 Q. Have you previously testified before the Florida Public
2 Service Commission ("Commission")?

3
4 A. Yes. I testified before this Commission in Docket No.
5 990001-EI regarding the appropriateness and prudence of
6 various purchased power agreements. I testified in
7 Docket No. 991779-EI regarding the appropriate
8 application of incentives to wholesale power sales by
9 investor-owned electric utilities. In addition, I
10 testified in Docket No. 010283-EI addressing the
11 appropriate regulatory treatment for non-separated
12 wholesale energy sales by investor-owned electric
13 utilities.

14
15 Q. What is the purpose of your direct testimony in this
16 proceeding?

17
18 A. The purpose of my testimony is to provide an overview of
19 the wholesale energy market and a description of Tampa
20 Electric's wholesale energy purchases and sales
21 activities from 1998 through 2001. I describe the key
22 activities Tampa Electric has undertaken in an effort to
23 take advantage of wholesale purchase and sale
24 opportunities for the benefit of its general body of
25 ratepayers. In addition, I describe the benefits Tampa

1 Electric achieved for its general body of ratepayers
2 through economy purchases and sales activities. I will
3 also provide an overview of the purchased power
4 agreements that Tampa Electric has entered into and for
5 which it is seeking cost recovery through the Fuel and
6 Purchased Power Cost Recovery and Capacity Cost Recovery
7 Clauses. My testimony also describes Tampa Electric's
8 purchased power strategy, which mitigates supply-side
9 risk while providing customers with economically priced
10 purchased power. Finally, I address the appropriateness
11 of encouraging utilities to implement wholesale energy
12 hedging strategies to manage risk.

13
14 Q. Please describe the wholesale energy market for the
15 period 1998 through 2001.

16
17 A. The wholesale energy market has been very active and
18 volatile over the period of 1998 through 2001. Each
19 year, the market is essentially divided into two distinct
20 periods, June through August (summer) and September
21 through May. High prices and volatility have occurred
22 during the summer periods, however, short-term price
23 spikes have also occurred in the spring, winter and fall.

24
25 Forwards prices for the summer of 1998 were well below

1 the spot market. Hot weather in the mid-west and
2 northeast caused the short-term market to peak in July.
3 This led to the demise of certain power marketing firms
4 which further exacerbated the problem. Spot market
5 prices increased dramatically.

6
7 In 1999, forwards summer period prices were again below
8 spot prices. This was the result of hot weather in the
9 northern states combined with numerous generating unit
10 outages. Again, spot market prices increased
11 dramatically.

12
13 Milder weather in the summer of 2000 quieted the eastern
14 U.S. spot markets, which were under the forwards market's
15 prices. California, however, experienced high spot
16 prices due to hot weather and insufficient generation.
17 In 2000, concern was focused on natural gas prices, which
18 began rising in June 2000 and peaked in January 2001.
19 High gas prices affected the entire nation, but were most
20 prevalent in California. These events caused the forwards
21 wholesale energy markets to rise. This rise was
22 especially prevalent during the first five months of
23 2001. High winter gas prices and a rise in the spring
24 forwards market impacted Tampa Electric because of its
25 planned generation maintenance activities during the

1 period. For example, forwards pricing for April 2001 was
2 \$52.00/MWH versus \$25.00/MWH for April 2000, as of
3 February of each year.
4

5 This year, mild summer weather and a softer than expected
6 gas market caused spot wholesale energy prices to be
7 lower than the forwards market.
8

9 Q. Please describe Tampa Electric's wholesale energy
10 purchases and sales activities for the years 1998 through
11 2001.
12

13 A. Tampa Electric generated 89 percent of its customers'
14 total energy needs from 1998 through 2000 and 83 percent
15 for the first eight months of 2001. The remaining 17
16 percent of customers' 2001 energy needs were provided
17 with purchased power, of which 50 percent was purchased
18 for economical purposes to avoid running more costly
19 generation. As discussed in the direct testimony of
20 Tampa Electric's witness Mark J. Hornick, past and
21 present purchased power volumes have been impacted by
22 several key operational events.
23

24 Tampa Electric constantly assesses the wholesale energy
25 market and enters into long-term and short-term purchases

1 based on price and availability of supply. In addition to
2 Hardee and qualifying facility purchases, the company
3 purchased 155 MW of firm capacity for the winter of 2001
4 and 160 MW for the summer of 2001, which were made at or
5 below current forwards markets prices. Tampa Electric
6 also contracted to lease 39 completely self-contained
7 portable generators to supplement the company's supply
8 through the summer period. The generators supplied up to
9 70 MW of peaking power to retail customers.

10
11 Through August of this year, 53 percent of Tampa
12 Electric's total purchases were from the short-term
13 hourly to monthly market and 47 percent of total
14 purchases were from the long-term market. This
15 purchasing strategy provides a balanced and diversified
16 approach to serving Tampa Electric's customers. From
17 January through August 2001, Tampa Electric paid an
18 average of \$57.36/MWH for total energy purchases compared
19 to a forwards energy market price of \$86.31/MWH for the
20 same period, indexed to December 2000. Further, Tampa
21 Electric's total purchased power cost in 2001, including
22 capacity payments, is less than the forwards energy
23 market. Tampa Electric has also entered into non-firm
24 non-separated wholesale sales which have provided retail
25 customers \$1,356,404 in gains, which are flowed back to

1 customers through the Fuel and Purchased Power Cost
2 Recovery Clause from January through August 2001. The
3 company has not entered into any firm separated or non-
4 separated wholesale sales since 1998.

5
6 Q. For the period January 1998 to December 2000, were Tampa
7 Electric's decisions regarding its Hardee Power Partners
8 ("HPP") wholesale energy purchases and sales reasonable?

9
10 A. Yes. The HPP cost-based purchases have been very
11 beneficial to Tampa Electric's customers. For example,
12 Hardee generating station availability was 96 percent in
13 2000 and is over 97 percent through July 2001. This year,
14 HPP's energy price of \$53.99/MWH was below the \$76.37/MWH
15 forwards market price as of December 2000. Further, even
16 if capacity payments are included, Hardee is less costly
17 than the forwards market.

18
19 HPP provided Tampa Electric 295 MW of gas-fired capacity
20 this year under the long-term purchased power agreement
21 that has been in effect since January 1993. This
22 agreement was amended in May 2000 when 82 MW of gas-fired
23 combustion turbine capacity was added. This long-term
24 agreement was presented to this Commission and approved
25 in Docket No. 990001-EI proceedings.

1 Q. What are Tampa Electric's plans for 2002 regarding
2 capacity and energy purchases?

3
4 A. In addition to the HPP and qualifying facility purchases
5 that continue through 2002, Tampa Electric finalized two
6 short-term firm capacity and energy purchases which
7 provide 40 MW for the winter period and 50 MW for the
8 summer period. The company has also committed to
9 purchase 50 MW of distributed generation for the summer
10 period. Tampa Electric is currently in the process of
11 negotiating the purchase of additional capacity and
12 energy for calendar year 2002. Short-term capacity
13 purchases will augment existing long-term purchases and
14 native generation to insure a minimum 15 percent planning
15 reserve margin. A combination of forwards and spot
16 market energy purchases will also be made to cover Tampa
17 Electric's active spring and fall generation maintenance
18 periods and peak period needs.

19
20 Q. Please describe the efforts Tampa Electric makes to
21 ensure that its wholesale purchases and sales activities
22 are conducted in a reasonable and prudent manner.

23
24 A. Tampa Electric aggressively shops for wholesale capacity
25 and energy, searching for reliable supply at the best

1 possible price. These purchases are evaluated based on
2 forwards and spot markets. The company now engages in
3 wholesale power purchases and sales with over 30
4 counterparties. Each counterparty's creditworthiness is
5 carefully checked before engaging in an enabling
6 agreement. Tampa Electric also subscribes to market
7 publications and services that provide current commodity
8 prices and availability of supply information. Purchases
9 are made to achieve required installed reserve capacity,
10 to meet our customers' needs during planned and unplanned
11 generating unit outages and for economical purposes.

12
13 Q. Does Tampa Electric engage in physical or financial
14 hedging of its wholesale energy transactions?

15
16 A. Tampa Electric does not purchase or sell wholesale energy
17 derivatives, however, the company's power supply strategy
18 includes self-generation and long-term and short-term
19 capacity and energy purchases. As stated earlier,
20 approximately half of Tampa Electric's 2001 purchased
21 power has been from long-term contracts. This strategy
22 provides the company the opportunity to take advantage of
23 favorable spot market pricing while maintaining reliable
24 service to its customers.

- 1 Q. Should physical or financial hedging be used by Florida's
2 investor-owned electric utilities to mitigate wholesale
3 energy price volatility?
4
- 5 A. Physical and financial hedges provide measurable market
6 price volatility protection; however, they come with a
7 price. The price can be quite high in a developing
8 market such as Florida's wholesale energy market.
9
- 10 Q. As the Commission continues to examine hedging practices,
11 what considerations should it take into account?
12
- 13 A. Should the Commission decide to continue pursuing hedging
14 practices, an assessment of the quantitative and
15 qualitative costs and benefits of physical and/or
16 financial hedging should be considered. It should be
17 determined if the benefits of an appropriate hedging
18 strategy outweigh the costs. Providing that benefits
19 outweigh costs, only then should the Commission and the
20 utility commit to an approved hedging strategy, which may
21 be implemented and evaluated on a calendar year basis.
22 In addition, in advance of implementing each utility's
23 strategy, the Commission and utilities must determine the
24 reporting requirements and a methodology for assessing
25 the expected effectiveness of the strategy. Each

1 utility's strategy will be unique to its given current
2 wholesale activities.

3
4 Q. Please summarize your testimony.

5
6 A. Tampa Electric has utilized its best efforts to take
7 advantage of opportunities in the wholesale electric
8 power market and those efforts have benefited the
9 company's retail customers. The company constantly
10 monitors and assesses the wholesale energy market to take
11 advantage of buying and selling opportunities that offer
12 cost savings to its general body of retail customers. The
13 company's energy supply strategy includes self-generation
14 and long and short-term power purchases. The company has
15 engaged in both forwards and spot wholesale energy
16 markets to provide customers with reliable supply at the
17 lowest possible cost. The company has also made non-
18 firm, non-separated wholesale energy sales which have
19 benefited its customers. Tampa Electric believes that
20 the subject of hedging for wholesale energy transactions
21 should be carefully analyzed before being implemented to
22 ensure that it is appropriate to pursue on a utility
23 specific basis.

24
25 Q. Does that conclude your testimony?

1

2 A. Yes, it does.

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