

ORIGINAL

1 BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

2 PREPARED DIRECT TESTIMONY

3 OF

4 W. L. BROWN

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

6
7 A. My name is Lynn Brown. My business address is 702 North
8 Franklin Street, Tampa, Florida 33602. I am employed by
9 Tampa Electric Company ("Tampa Electric" or "company") as
10 Director-Wholesale Marketing and Sales.

11
12 Q. Please provide a brief outline of your educational
13 background and business experience.

14
15 A. I received a Bachelors degree in Electrical Engineering
16 from Louisiana State University in 1972 and subsequently
17 joined Tampa Electric. I have held various engineering,
18 operations and managerial positions in Energy Delivery
19 from 1973 through 1997. I became Manager of Short Term
20 Wholesale Trading in April 1997 and was promoted to
21 Director-Wholesale Marketing and Sales in August of last
22 year. I am responsible for short and long-term wholesale
23 power purchases.

24
25 Q. What is the purpose of your testimony in this proceeding?

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1 **A.** The purpose of my testimony is to provide an overview of
2 the purchased power agreements that Tampa Electric has
3 entered into and is seeking to recover through the Fuel
4 and Purchased Power Cost Recovery and Capacity Cost
5 Recovery Clauses. I will also provide an overview of the
6 wholesale energy market, its changes over the past
7 several years and its impact on purchased power costs.

8
9 **Q.** Has Tampa Electric entered into any purchased power
10 agreements that were not included in the company's last
11 purchased power projections?

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13 **A.** Yes. Tampa Electric has signed several agreements for
14 the purchase of firm capacity and energy for 1999, 2000
15 and beyond. The company is also in the process of
16 negotiating for additional capacity and energy for the
17 year 2000 to achieve desired operating reserves.

18
19 The company has entered into five contracts with four
20 suppliers of capacity and energy. Three of the suppliers
21 are qualifying facilities: Okeelanta Corporation,
22 Farmland Hydro, and Auburndale Power Partners. The
23 fourth supplier is Hardee Power Partners Limited ("HPP").
24 The Company's purchase from HPP was accomplished through
25 an amendment to the purchased power agreement originally

1 signed on July 27, 1989 and approved by this Commission
2 in Docket No. 880309-EC and Order No. 22335.

3
4 Q. What are the terms of these agreements?

5
6 A. The terms of the agreements are as follows:

7
8 Okeelanta Corp. (1) May 1, 1999 - June 30, 1999
9 Farmland Hydro June 1, 1999 - September 30, 2000
10 Auburndale Power July 1, 1999 - September 30, 2000
11 Okeelanta Corp. (2) September 1, 1999 - March 31, 2000
12 Hardee Power Partners May 15, 2000 - December 31, 2012

13
14 Q. Why did Tampa Electric enter into these five purchased
15 power agreements?

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17 A. Tampa Electric entered into these five agreements in
18 order to maintain overall system reliability for its
19 retail ratepayers. As the company has reported in its
20 Ten-Year Site Plan, retail load has increased since 1997
21 at a higher than expected rate causing a significant
22 increase in the use of demand-side management ("DSM")
23 programs. Accordingly, the company has modified its
24 planning criteria to not only plan for a minimum 15
25 percent reserve margin but to improve the quality of its

1 reserve margin by planning for a minimum of 7 percent
2 supply-side resources. The company plans to achieve the
3 desired system reliability for its retail customers by
4 accelerating new generating unit construction and
5 acquiring firm capacity purchases. This enhanced
6 planning criteria is described in detail in Tampa
7 Electric witness Mark D. Ward's testimony filed in Docket
8 No. 981890-EU.

9
10 **Q.** How did the company determine that the terms of the
11 purchased power agreements were prudent?

12
13 **A.** In determining the appropriateness and need for purchased
14 power agreements, it is important to understand the
15 wholesale market in Florida and the rest of the country.
16 This market has changed significantly over the past few
17 years. From a State perspective, retail demand and
18 energy usage have increased at higher-than-expected rates
19 and existing generation and DSM resources have been
20 utilized at high capacity factors and frequency. The
21 State is experiencing lower planning and operating
22 reserve margins, there is greater reliance on DSM
23 resources and there are limited import capabilities.
24 Until recently, utilities have deferred construction of
25 capacity additions. The same is true in the southeast

1 and several other regions of the United States. Some
2 affected utilities, including Tampa Electric, have
3 recognized State and jurisdictional needs. Resource
4 plans have been modified to meet this growth in demand,
5 but until additional capacity is constructed, utilities
6 have had to rely heavily on DSM and purchased power at
7 higher costs to meet the needs of their retail customers.

8
9 Additionally, an energy shortage in another geographic
10 region can affect the price and availability of energy
11 within our state. Hence, Florida utilities are now
12 concerned with both the balance of in-state and out-of-
13 state supply and demand. For example, when price spikes
14 occur in other regions, Florida utilities may find that
15 significant amounts of wholesale energy have been
16 exported out of state to more lucrative markets. This
17 means that if a Florida utility requires energy during
18 such times, it must be willing to pay high spot prices,
19 contract for firm purchases, or build additional
20 generation resources to mitigate its exposure to such
21 prices. Tampa Electric has found that forward energy
22 prices for the eastern United States trading hubs such as
23 Cinergy are good indicators of prices in Florida. These
24 prices have increased rapidly over the last 18 months.

25

1 The nature of these purchases has also changed. Today,
2 utilities must balance firm and non-firm "block"
3 purchases and hourly purchases to serve their retail
4 load. "Blocks" of firm or non-firm energy transactions
5 are typically purchased and sold for periods of eight to
6 16 hours per day. The amount of energy available to be
7 purchased and sold on an hourly basis on a given day is
8 impacted by the quantity of block purchases and sales
9 conducted on that day. Several years ago, most non-firm
10 energy bought and sold on the wholesale market was "next-
11 hour," cost-based economy energy. Today less of this
12 type of energy is available for purchase. Whenever Tampa
13 Electric anticipates a shortfall, it generally purchases
14 a combination of blocks and hourly energy to meet native
15 load requirements.

16
17 Given these market characteristics and the lead time
18 needed to construct new generating units, Tampa Electric
19 recognized the need to secure purchased power agreements
20 for its native load needs and to mitigate costs and
21 availability risks. In early 1999, Tampa Electric
22 solicited bids from potential power suppliers for
23 specific periods for 1999, 2000 and beyond. Based upon
24 the responses, Tampa Electric negotiated the five
25 purchases mentioned above. Each purchase is for firm

1 capacity and energy priced at the best available market
2 price for the required periods of time.

3
4 **Q.** Please describe the availability of purchased power in
5 late July 1999.

6
7 **A.** At the end of July, the New England and Midwest regions
8 of the United States were experiencing generation
9 shortfalls. As a result, most of the available energy in
10 Florida was being exported to this lucrative market.
11 Tampa Electric was in need of purchased power to serve
12 its native load customers on July 29, 30 and 31. In an
13 effort to mitigate the high market price of purchased
14 power, the company offered to cogenerators in its service
15 area to purchase any energy they could make available and
16 export to the company's system. The offer was made to
17 every Tampa Electric cogeneration customer based on a
18 fixed price for a fixed period of time with advance
19 notice given by the company. The purchase price offer
20 was higher than standard cogeneration firm and as-
21 available energy rates but was lower than the prevailing
22 market price. Several of the cogenerators took advantage
23 of this offer and were able to provide needed energy to
24 Tampa Electric's system.

25

1 Q. How were these transactions treated?

2

3 A. These transactions were treated in the same manner as
4 other non-firm, short-term purchases and were included in
5 the company's purchased power expense for July 1999.

6

7 Q. Are the capacity and energy costs associated with these
8 purchased power transactions included in the company's
9 Fuel and Purchased Power Cost Recovery and Capacity Cost
10 Recovery factors for 2000?

11

12 A. Yes. The capacity and energy costs are included in the
13 schedules submitted by Tampa Electric witness Karen O.
14 Zwolak in Schedule E-7.

15

16 Q. As you described the wholesale market, you indicated that
17 hourly availability of energy has changed. Please
18 describe how Tampa Electric utilizes Florida's Energy
19 Broker Network ("broker") for short-term, non-firm
20 transactions?

21

22 A. From time to time, Tampa Electric utilizes the broker to
23 make short-term, non-firm sales and purchases. At one
24 time, the broker was the most effective available method
25 of matching buyers and sellers but that has changed.

1 Today, many utilities either make hourly or block energy
2 sales off the broker at market-based prices. Since the
3 broker is limited to cost-based transactions, it has
4 experienced a steady decline in usage due to greater
5 profit opportunities elsewhere for those seeking to sell
6 power.

7
8 **Q.** What is the most effective means of conducting economy
9 energy transactions today?

10
11 **A.** While the broker can be the best means for a buyer to
12 enter into a cost-based hourly transaction, other more
13 lucrative opportunities exist for sellers in today's
14 market. These include market-based, hourly, off-broker
15 transactions and same day or next day market-based block
16 sales.

17
18 **Q.** Please describe the types of economy sales that Tampa
19 Electric has entered into that are made with or without
20 the use of the broker.

21
22 **A.** Tampa Electric has entered into FERC-approved non-
23 separated, economy sales transactions arranged with and
24 without the use of the broker. Economy sales, either
25 Schedule C (Economy Interchange Service) or Schedule X

1 (Extended Economy Interchange Service) sales, are short-
2 term, non-firm sales. Schedule C sales are traditional,
3 cost-based, "split the savings," hourly economy sales
4 transactions that can be made either with or without the
5 use of the broker. Schedule X sales are traditional,
6 cost-based, "split the savings," multi-hour, economy
7 sales transactions that can not be made with the use of
8 the broker.

9
10 **Q.** In general, how are Schedule C and X transactions made?

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12 **A.** These transactions are based upon matching a buyer's quote
13 of higher incremental costs to a seller's quote with lower
14 incremental costs. The transaction price results in a
15 50/50 sharing of the difference between the quotes.
16 Schedule C and X transactions are subject to immediate
17 cancellation by the seller if the capacity is needed to
18 meet other commitments.

19
20 **Q.** Does the "split the savings" concept for economy sales
21 change if the broker is not utilized?

22
23 **A.** No. The method utilized for matching the buyer and seller
24 is different, however, the same cost-based, "split the
25 savings" schedules are employed. Therefore, there is no

1 need to make a differentiation between non-separated
2 energy sales made with or without the use of the broker.

3 Q. Does Tampa Electric enter into other non-firm sales
4 transactions?

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6 A. Yes. Tampa Electric also enters into intermediate-term
7 (less than one year), non-firm sales under Schedule J
8 (Negotiated Interchange Service) letters of commitment.
9 Schedule J sales are not "split the savings" transactions.
10 These sales are negotiated, non-firm energy transactions.
11 All proceeds from these sales are currently credited
12 through the Fuel and Purchased Power Cost Recovery Clause.
13 No Schedule J sales are made through the broker and these
14 are not an issue in this proceeding.

15

16 Q. Please summarize your testimony.

17

18 A. In order to maintain its overall system reliability for
19 its retail ratepayers, Tampa Electric entered into five
20 purchased power agreements beginning in 1999. Although
21 four of the agreements affect only 1999 and 2000, the
22 fifth is a long-term purchased power agreement with HPP.
23 This cost-based agreement was contemplated as an option
24 in the original agreement with HPP and Seminole Electric
25 Cooperative entered into in 1989 that was reviewed by

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this Commission and approved by the FERC. Based upon changing market conditions and a diligent evaluation of alternatives, these agreements were deemed to provide firm capacity and energy at the best available prices for the periods of time needed.

Q. Does this conclude your testimony?

A. Yes, it does.