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April 30, 2010

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Ms. Ann Cole, Director
Division of Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Review of the Continuing Need and Cost Associated with Tampa Electric Company's Five Combustion Turbines and Big Bend Rail Facility;
FPSC Docket No. 090368-EI

Dear Ms. Cole:

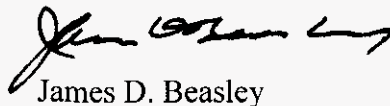
Enclosed for filing in the above docket on behalf of Tampa Electric Company are the original and fifteen (15) copies of each of the following:

1. Prepared Direct Testimony and Exhibit (WRA-1) of William R. Ashburn.
2. Prepared Direct Testimony and Exhibit (MJH-1) of Mark J. Hornick.

Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning same to this writer.

Thank you for your assistance in connection with this matter.

Sincerely,



James D. Beasley

COM 5
APA 1
ECR 5
GCL 1
RAD 2
SSC
ADM JDB/pp
OPC Enclosures
CLK Rep

cc: All parties of record (w/encls.)

DOCUMENT NUMBER DATE

03608 APR 30 2010

FPSC - DIVISION OF CLERK

CERTIFICATE OF SERVICE

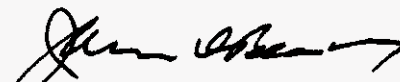
I HEREBY CERTIFY that a true and correct copy of the foregoing testimony and exhibits, filed on behalf of Tampa Electric Company, has been furnished by U. S. Mail or hand delivery (*) on this 30th day of April 2010 to the following:

Mr. Keino Young*
Staff Attorney
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ATTORNEY



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 090368-EI
IN RE: REVIEW OF THE CONTINUING NEED AND
COSTS ASSOCIATED WITH TAMPA ELECTRIC
COMPANY'S FIVE COMBUSTION TURBINES AND BIG
BEND RAIL FACILITY

TESTIMONY AND EXHIBIT
OF
MARK J. HORNICK

EXHIBIT NUMBER-DATE

03508 APR 30 2

~FPSC-COMMISSION CLERK

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **PREPARED DIRECT TESTIMONY**

3 **OF**

4 **MARK J. HORNICK**

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

8
9 **A.** My name is Mark J. Hornick. My business address is 702
10 North Franklin Street, Tampa, Florida 33602. I am
11 employed by Tampa Electric Company ("Tampa Electric" or
12 "company") in the position of Director of Planning,
13 Engineering and Construction.

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

17
18 **A.** I received a Bachelor of Science Degree in Mechanical
19 Engineering in 1981 from the University of South
20 Florida. I am a registered professional engineer in the
21 state of Florida. I began my career with Tampa Electric
22 in 1981 as an Engineer Associate in the Production
23 Department. I have held a number of engineering and
24 management positions at Tampa Electric's power
25 generating stations. From 1991 to 1998, I was a manager

1 at Big Bend Power Station with various responsibilities
2 including serving as Manager of Operations from 1995 to
3 1998. In July 1998, I was promoted to Director, Fuels
4 where I was responsible for managing Tampa Electric's
5 fuel procurement and transportation activities.

6
7 In March 2000, I was promoted to General Manager, Polk
8 and Phillips Power Stations. I was responsible for the
9 overall operations of these two generating facilities.
10 I have broad experience in the engineering and
11 operations of power generation equipment including
12 Integrated Gasification Combined Cycle ("IGCC")
13 technology. I have served on the Electric Power
14 Research Institute's "IGCC Experts Panel".

15
16 In October 2008, I was promoted to Director of
17 Engineering & Construction where I was responsible for
18 managing all Energy Supply centralized engineering and
19 construction related activities. This role was expanded
20 in October 2009 to include the Resource Planning
21 function which coordinates the daily commitment of our
22 generating units and plans for future generation
23 expansion to meet forecasted demand.

24
25 Q. Have you testified previously?

1 **A.** Yes. I testified before the Florida Public Service
2 Commission ("FPSC" or "Commission") in Docket No.
3 080317-EI regarding Tampa Electric's request for an
4 increase in base rates and miscellaneous service
5 charges. The step increase being addressed in this
6 docket was approved in the aforementioned docket.

7

8 **Q.** What is the purpose of your direct testimony?

9

10 **A.** The purpose of my testimony is to prove that Tampa
11 Electric has satisfied the conditions relating to the
12 addition of five combustion turbine ("CT") generating
13 units and a solid fuel rail unloading facility ("rail
14 facility") installed at Big Bend Power Station ("Big
15 Bend") as set forth in Order No. PSC-09-0283-FOF-EI
16 ("Order No. 09-0283") in Docket No. 080317-EI, issued
17 April 30, 2009. Order No. 09-0283 approved a step
18 increase designed to recover the costs of the five CTs
19 and Big Bend rail facility put into service during 2009,
20 to become effective on January 1, 2010, subject to
21 certain conditions.

22

23 **Q.** Have you prepared an exhibit in support of your
24 testimony?

25

1 **A.** Yes, I have. Exhibit No. _____ (MJH-1), consisting of
2 four documents was prepared by me or under my direction
3 and supervision.

4
5 **Q.** Has the step increase approved in Order No. 09-0283 been
6 implemented?

7
8 **A.** Yes. On December 1, 2009, the Commission voted to
9 approve the implementation of the step increase
10 effective January 1, 2010 in the amount of \$25,742,209,
11 subject to refund with interest, pending the outcome of
12 an evidentiary hearing. Tampa Electric implemented the
13 step increase rates subject to refund as approved in
14 Order No. PSC-09-0842-PCO-EI ("Order No. 09-0842"). The
15 step increase rates are discussed in detail in the
16 direct testimony of Tampa Electric witness William R.
17 Ashburn.

18
19 **The Big Bend Rail Facility**

20 **Q.** What was the condition set forth in Order No. 09-0283
21 related to the Big Bend rail facility?

22
23 **A.** The order stated that the portion of the step increase
24 pertaining to the Big Bend rail facility was conditioned
25 on the facility being completed and in commercial

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operation by December 31, 2009.

Q. Was the Big Bend rail facility completed and placed into commercial operation on or before December 31, 2009 as required in Order No. 09-0283?

A. Yes. Tampa Electric filed a Notice of Commercial Operation of the Big Bend Rail Unloading Facility on December 18, 2009 in this docket advising the Commission of the December 16, 2009 in-service commercial operation of the rail facility. A true copy of Commercial Operations Memorandum regarding the facility, which was provided as Exhibit "A" to the company's December 18, 2009 filing, is also provided as Document No. 1 of my Exhibit No. ____ (MJH-1). In addition photographs of the rail facility are provided as Document No. 2 of my Exhibit No. ____ (MJH-1).

Q. How much coal was received and unloaded at the Big Bend rail facility during calendar year 2009?

A. From December 5, 2009 through December 31, 2009, Tampa Electric received and unloaded 34,955 tons of coal delivered by three unit trains, which totaled 298 rail cars, at its Big Bend rail facility. Of those

1 deliveries, two trains were received prior to
2 declaration of commercial operation. The third train
3 was received after the commercial operation date of
4 December 16, 2009 and contained 11,739 tons of coal.
5

6 **Q.** How much coal has been received and unloaded at the Big
7 Bend rail facility from January 1, 2010 through March
8 31, 2010?
9

10 **A.** From January 1, 2010 through March 31, 2010, the rail
11 facility has received and unloaded 482,503 tons of coal
12 delivered by 40 unit trains.
13

14 **Q.** What are Tampa Electric's expected coal delivery
15 receipts at the Big Bend rail facility going forward?
16

17 **A.** Based on existing transportation contract terms, Tampa
18 Electric expects to receive, at a minimum, 14 unit
19 trains of coal per month through 2014, thereby supplying
20 Tampa Electric with an average of 165,000 tons of coal
21 per month going forward via rail transportation. The
22 rail shipments are expected to vary throughout the year
23 as customer electric usage varies by month, but will
24 average 165,000 tons per month.
25

1 **Cost of the Big Bend Rail Facility**

2 **Q.** What is the actual total cost of the Big Bend rail
3 facility project?

4
5 **A.** The total cost for the Big Bend rail facility project is
6 forecasted to be \$61,029,000, including AFUDC, as of
7 March 31, 2010. This is \$14,092,000 greater than the
8 \$46,937,000 used in the calculation of Tampa Electric's
9 step increase rates as of January 2010.

10

11 **Q.** How were these costs derived?

12

13 **A.** They were derived from the books and records of the
14 company as maintained in the normal course of business.

15

16 **Q.** What steps did Tampa Electric take to ensure that the
17 costs it incurred with respect to the Big Bend rail
18 facility were reasonable and prudent?

19

20 **A.** Tampa Electric evaluates the details of each project and
21 selects the most appropriate contracting method to
22 ensure that goals for cost, risk allocation, safety,
23 performance, etc. are met. The rail project was
24 originally bid as an Engineer Procure Construct ("EPC")
25 contract. Evaluation of the responses indicated that

1 the EPC contractors had placed significant contingency
2 in their bids which increased the project costs. The
3 decision was made to break the project into smaller
4 elements and obtain lump sum pricing for each piece.
5 This approach allocated project risk in a more prudent
6 manner, which resulted in lower overall project costs.

7
8 In addition, the company routinely utilizes request for
9 proposals ("RFPs") to ensure the selection of equipment,
10 supplies and services are the most cost effective
11 alternatives available. There were 21 RFPs issued
12 during the construction of the Big Bend rail facility.
13 Tampa Electric assigned a project manager and project
14 team with accountability to oversee all contractor
15 activity, achievement of project milestones, and
16 management of project costs to ensure the costs incurred
17 by the company were reasonable and prudent.

18
19 **The Five CT Generating Units**

20 **Q.** What were the conditions set forth in Order No. 09-0283
21 related to the five CTs?

22
23 **A.** The order stated that the portion of the step increase
24 pertaining to the five CTs was conditioned on the units
25 being completed and in commercial operation by December

1 31, 2009. Second, the five CTs must continue to be
2 needed for load generation.

3
4 **Q.** Were each of the five CTs completed and placed in
5 commercial operation by December 31, 2009, as required
6 in Order No. 09-0283?

7
8 **A.** Yes. All of the CTs were completed and placed in
9 commercial operation by December 31, 2009. Tampa
10 Electric provided documentation, Appendix "B" -
11 Commercial Operation Memorandums, regarding the
12 commercial in service dates with its Petition for
13 Approval of Rate Schedules filed October 12, 2009 in
14 this docket. Achievement of the requirement for the
15 five CTs actually being in service during 2009 is
16 further confirmed in Order No. 09-0842, which states:

17
18 Along with its Petition, TECO provided
19 documentation that each of the five CTs has been
20 placed in commercial operation on the dates
21 indicated below:

22

<u>Unit</u>	<u>In Service Date</u>
Bayside CT 5	April 27, 2009
Bayside CT 6	April 20, 2009

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Bayside CT 3 July 13, 2009
Bayside CT 4 July 13, 2009
Big Bend CT 4 August 26, 2009

Our staff verified the in-service dates of all five CTs by reviewing the Commercial Operation Memorandum for each CT attached to the Petition, as well as TECO's responses to our data requests in this docket and the May, July, and August A-Schedules filed by TECO with this Commission in the Fuel Docket. In addition, our staff from the Tampa District Office conducted a site visit and verified that all five CTs are fully completed and appear to be functional. Therefore, we find that TECO has met the condition of the Final order that all five CTs are actually in service during 2009.

In addition, a photograph of the four Bayside CTs is provided as Document No. 3 of my Exhibit No. ____ (MJH-1).

The Five CTs are Needed for Load Generation

Q. Order No. 09-0283 states that, Tampa Electric's ability to recover the portion of the step increase pertaining

1 to the five CTs is conditioned on there being a
2 continued need of the CTs for load generation. Do they
3 meet this condition?

4
5 **A.** Yes, they certainly do. The CTs are needed for load
6 generation. Load generation is not simply meeting the
7 minimum 20 percent reserve margin, but rather being able
8 to select the best overall solution to meet customer
9 demand for electricity, which involves having the right
10 generating equipment and other resources available to
11 support Tampa Electric's system under various conditions
12 in a reliable, efficient and cost effective manner.

13
14 The continuing need for the CTs was confirmed during the
15 company's winter peak period in January 2010, when they
16 were used extensively to meet peak demand, respond to
17 rapidly increasing customer demand and to avoid
18 blackouts or interruptions to customers. This
19 experience is consistent with the company's site
20 planning projections as well as the Commission Staff's
21 findings that all five CTs would be needed by January
22 2010 using monthly reserve margin information from Tampa
23 Electric's 2007 through 2009 Ten-Year Site Plans.

24
25 **Q.** Have the five CTs been needed and beneficial during

1 periods of peak demand?
2

3 **A.** Absolutely. The sustained cold weather period from
4 January 6 through January 12, 2010 is an excellent
5 example of the continuing need and value provided by the
6 CTs. During this seven-day period, the CTs were started
7 a total of 41 times and they operated at a 20 percent
8 capacity factor, which is significantly higher than the
9 typical peaking unit capacity factor of approximately
10 five to ten percent. The CTs also operated more
11 efficiently than the company's other peaking units,
12 which resulted in fuel savings for customers.

13
14 Power purchases were limited and unavailable at times
15 during this cold weather period. If the CTs were not in
16 service, Tampa Electric would not have been able to meet
17 record-breaking peak demands without interrupting
18 customers as other state IOUs were forced to do in order
19 to meet customer demand.

20
21 The supply of natural gas to the state was strained
22 during this seven-day period of cold weather and high
23 electricity demand. However, Tampa Electric was able to
24 take advantage of the dual fuel capability of Big Bend
25 CT 4, one of the five CTs installed during 2009, by

1 operating it on distillate fuel oil. As a result, gas
2 was freed up and available for use by other Tampa
3 Electric generating units, which helped ensure that our
4 customers had an adequate supply of electricity to meet
5 their needs.

6
7 Additionally, the quick start and rapid loading
8 capability of the CTs was used multiple times during
9 this cold weather period. Winter peak demand increases
10 rapidly on cold mornings as customers turn on heat, use
11 hot water and operate other appliances. On January 11,
12 2010, Tampa Electric experienced a new instantaneous
13 winter peak demand of 4,742 MW, which is 11 percent
14 higher than the previous winter peak set in January 2009
15 and nine percent higher than the previous summer peak
16 set in August 2007. The demand on Tampa Electric's
17 system increased by 754 MW in the two hours leading up
18 to the peak on January 11, 2010. The CTs were
19 dispatched as the demand rapidly increased each morning,
20 which allowed Tampa Electric to serve its customers in a
21 reliable and efficient manner.

22
23 **Q.** Please describe the monthly utilization of each of these
24 units.

1 **A.** Document No. 4 of my Exhibit No. ____ (MJH-1) reflects
2 the utilization of each CT placed into service during
3 2009 by providing the average number of start times for
4 each unit by month since being placed into service.
5 During the summer demand period of May through August,
6 the 2009 CTs were started between 21 and 29 times on
7 average each month. The 2009 average capacity factor
8 for the five CTs since each unit went into commercial
9 service is over 14 percent. As previously stated, the
10 typical peaking unit capacity factor is approximately
11 five to ten percent. Therefore, the use of the CTs has
12 exceeded what is typically expected of peaking units.

13

14 **Q.** How did the actual system peak demand experienced in
15 January 2010 compare to the winter peak demand projected
16 in Tampa Electric's rate case load forecast?

17

18 **A.** The actual system peak demand was 4,742 MW versus the
19 4,605 MW forecast. In other words, the actual peak
20 demand experienced for winter 2010 was three percent
21 higher than the forecasted load in the company's rate
22 case. This is one example of why the Commission has
23 established that the minimum planning reserve margin
24 should be 20 percent.

25

1 The winter peak period in January 2010 demonstrates this
2 point and shows why having the five CTs available for
3 load generation was important. Even though the
4 company's forecasted reserve margin for January 2010 was
5 25 percent, the company's actual reserve margin during
6 portions of the peak period was as low as six percent,
7 which is very close to the point at which the company
8 could have been required to begin shedding load or
9 interrupting customers. The five CTs provided needed
10 capacity and important operating flexibility during this
11 critical period.

12
13 Customers rely heavily on electricity during extreme
14 weather conditions and it is the company's
15 responsibility to be prepared to serve their needs.
16 Cold weather situations are particularly challenging and
17 create significant peak demands. Many customers use
18 heat pump based systems for home heating. These units
19 run efficiently until the outside temperature drops into
20 the 30's and below. In such cases, many heat pump
21 systems must run continuously to keep indoor
22 temperatures at acceptable levels. As a result, there
23 is no system load diversity. In other words, a
24 reduction in the overall system load demand does not
25 occur as it typically would from the cycling on and off

1 of customer heat pump units at different times. In very
2 cold conditions the heat pump systems cannot maintain
3 indoor temperatures and the emergency heat or resistance
4 strip heaters are used to supplement the heat pump.
5 These heaters consume three to four times the amount of
6 energy as an efficiently running heat pump. The most
7 recent January 11, 2010 peak demonstrated these facts
8 and reinforces the value of the CTs in meeting the
9 demands of our customers under all conditions.

10
11 **Q.** Was the need for the five CTs shown in previous Tampa
12 Electric Ten-Year Site Plans?

13
14 **A.** Yes. In Tampa Electric's 2006 and 2007 Ten-Year Site
15 Plans, the Aero CT technology was identified as a viable
16 technology for the company's 2009 and 2010 generating
17 need. In the 2008 and 2009 Tampa Electric Ten-Year Site
18 Plans, the specific units and in-service dates were
19 provided.

20
21 **Q.** Please explain the minimum 20 percent planning reserve
22 margin requirement, its origin and its effect upon the
23 reliability of Tampa Electric's system.

24
25 **A.** The purpose of a minimum 20 percent planning reserve

1 margin requirement is to ensure the availability of
2 adequate supply and demand side resources to meet firm
3 peak demand during both the summer and winter system
4 peak periods. This additional installed capacity
5 ensures reliable service in the event an unplanned
6 outage occurs on a generating unit, or higher than
7 forecasted demands occur during the seasonal peak
8 periods.

9
10 The minimum 20 percent reserve margin requirement was
11 established due to the Commission's expressed concern
12 about the adequacy of the planned reserve margin for
13 Peninsular Florida, after reviewing the Ten-Year Site
14 Plans filed in 1997 and 1998. In Docket No. 981890-EU,
15 the Commission issued Order No. PSC-99-2507-S-EU ("Order
16 No. 99-2507") on December 22, 1999, which approved the
17 parties stipulation to voluntarily agree to meet a
18 minimum 20 percent installed reserve requirement. The
19 Stipulation approved in Order No. 99-2507 states:

20
21 The twenty percent (20%) reserve margin planning
22 criterion will be a minimum; no maximum or cap
23 will be represented or implied by this
24 criterion.

1 Furthermore, the Stipulation states:

2
3 Neither the adoption by the IOUs of the minimum
4 twenty percent (20%) planning criterion nor the
5 approval of this Stipulation by the Commission
6 shall be deemed to create any presumption that
7 capacity additions must be through any
8 particular mix of generation and/or demand-side
9 resources. Nor shall said adoption or approval
10 be deemed to create any presumption with respect
11 to any proposals for adding generating capacity
12 or create a presumption that a generating
13 capacity addition proposed by any entity is not
14 needed.

15
16 The minimum 20 percent planning reserve margin
17 requirement has enabled Tampa Electric to ensure
18 reliability of service at all times, and especially
19 during planned outages and peak demand periods, with a
20 cost effective mix of resources. By constructing and
21 placing into service two of the Bayside units in April
22 2009, and the remaining two Bayside units and the Big
23 Bend unit in July and August 2009, Tampa Electric was
24 able to meet both the forecasted summer peak demand in
25 2009 and the winter peak demand in 2010.

1 Q. Is it practical to build generation to exactly meet the
2 minimum 20 percent planning reserve margin?

3
4 A. No, it is not practical to build generation to meet, but
5 not exceed the minimum 20 percent planning reserve
6 margin. Generating units are added in cost effective
7 increments, which vary in size due to technology type,
8 not in single MW increments to precisely match the
9 forecasted system demand. Typically, when a generating
10 unit is placed in service, the minimum 20 percent
11 planning reserve margin is exceeded until customer load
12 demand increases. Historically, the Commission has not
13 viewed the minimum 20 percent planning reserve margin
14 standard as a stand-alone, bright line test for
15 recovering prudently incurred costs. In fact, the
16 Commission has allowed recovery of the new generating
17 units in base rates even when the minimum 20 percent
18 reserve margin was exceeded. During this time, the
19 customers receive operational benefits such as increased
20 system reliability. To suggest that a utility must
21 comply with a minimum 20 percent reserve criteria and
22 never exceed that value as generating units are added to
23 the system is impractical and uneconomic.

24
25 Q. Were there other benefits associated with the

1 construction schedule of the five CTs?

2

3 **A.** Yes. The sequence of construction activities allowed
4 the company to optimize the offsite fabrication of
5 equipment and on-site construction activities.
6 Substantial savings in project costs were achieved by
7 planning an orderly sequence of activities from one unit
8 to the next unit. Contractors staffed the job
9 efficiently and avoided additional costs due to
10 mobilization and demobilization charges associated with
11 starting and stopping construction.

12

13 **Q.** What role have the CTs played in connection with the
14 outage scheduled for the Big Bend Unit 1 Selective
15 Catalytic Reduction ("SCR") installation?

16

17 **A.** Having the five CTs in service during the 2010 Big Bend
18 Unit 1 SCR installation outage helped provide the
19 capacity needed to maintain the minimum 20 percent
20 reserve margin planning criterion. Tampa Electric does
21 not typically schedule planned outages during summer or
22 winter peak demand periods; however, the SCR
23 installation outage on Big Bend Unit 1 and the earlier
24 SCR installation outages on Big Bend Units 2, 3 and 4
25 were required to meet the conditions of the

1 environmental agreements Tampa Electric entered into
2 with the Florida Department of Environmental Protection
3 on December 16, 1999 and the United States Environmental
4 Protection Agency on February 29, 2000.

5
6 **Q.** What was the schedule for the Big Bend Unit 1 outage for
7 the SCR installation?

8
9 **A.** The Big Bend Unit 1 outage for the SCR installation was
10 scheduled from November 29, 2009 through April 8, 2010
11 to meet the requirements of the environmental agreements
12 which mandate the SCR conversion and the applicable
13 nitrogen oxides emissions rate by May 1, 2010.

14
15 **Q.** Was it necessary for Tampa Electric to perform the
16 installation of the SCR on Big Bend Unit 1 during the
17 November 2009 through April 2010 time frame?

18
19 **A.** Yes, the environmental agreements are legally binding
20 and specified a completion date of no later than May 1,
21 2010. Attempting to schedule the Big Bend Unit 1 outage
22 earlier in 2009 was not a viable option due to other
23 planned outage requirements and the need to avoid
24 outages during the summer period.

25

1 Q. Was the timing of the scheduled outages for Big Bend
2 Unit 1 SCR installation flexible?

3
4 A. No, the timing of the scheduled outages for the Big Bend
5 SCR installations was not flexible, discretionary or
6 something that could be postponed easily due to the
7 tightly scheduled completion deadlines detailed in the
8 environmental agreements. In order to allow the
9 continued use of coal as a fuel for Big Bend Units 1
10 through 4, the environmental agreements required Tampa
11 Electric to sequentially install SCR technology on those
12 units. Specifically, the installation requirements were
13 staged as follows: 1) the first of the units on or
14 before May 1, 2007; 2) the second of the units on or
15 before May 1, 2008; 3) the third of the units on or
16 before May 1, 2009; and 4) the fourth unit on or before
17 May 1, 2010. For efficiency and cost effectiveness, the
18 company agreed to complete the SCR installation on unit
19 4 first, followed by unit 3, then unit 2 and finally
20 unit 1. Due to the large amount of work needed to
21 complete the SCR installations and the extended length
22 of these outages, the company scheduled these outages in
23 the fall and winter periods immediately preceding the
24 defined deadlines to minimize the overall costs to its
25 customers.

1 **Q.** Would a purchased power arrangement to cover the Big
2 Bend Unit 1 outage for the SCR installation have
3 provided a reliable and cost effective alternative as
4 opposed to the completion of the five CTs?

5
6 **A.** No. Two of the CTs were needed to meet the minimum 20
7 percent reserve margin planning criterion for summer
8 2009. The company viewed that the remaining three CTs
9 provided a more reliable and cost effective alternative
10 to a possible purchased power agreement to cover the Big
11 Bend Unit 1 outage during the SCR installation. The new
12 CTs are more efficient than many other peaking units
13 which would be operated to provide the purchased power.
14 Since the CTs are located within Tampa Electric's
15 service area, they provide a higher quality of reserves
16 than purchased power, which may be transmitted over
17 longer distances from outside Tampa Electric's control
18 area. Additionally, transmission service needed for
19 delivery of the purchased power may be subject to
20 curtailment; therefore, it may not be available during
21 critical peak periods, as was the case during the cold
22 weather in January 2010. Additionally, all five CTs
23 provide beneficial operating characteristics such as
24 black start and quick start capabilities, which improve
25 reliability and reduce overall fuel costs for Tampa

1 Electric's customers.

2

3 **Q.** At the time of the rate case hearing in January 2009,
4 did the company consider the possibility of deferring
5 the construction of the five CTs?

6

7 **A.** Yes, however, the need for the units in terms of their
8 capacity, economics, operating capabilities and role in
9 the company's dispatch plans compelled moving forward.
10 Moreover, deferring the construction of the CTs would
11 not have been practical or cost effective.

12

13 **Q.** What circumstances led to these conclusions?

14

15 **A.** Bayside CTs 5 and 6 were nearing mechanical completion
16 at the end of January 2009 and deferring the remaining
17 three CTs would have resulted in additional costs due to
18 construction inefficiencies as well as demobilization
19 and remobilization costs.

20

21 By January 15, 2009, there were 29 separate contracts in
22 place covering the civil, structural, mechanical,
23 electrical, instrumentation, procurement and
24 construction of the five CT units. This represented a
25 total contract value of \$149,079,666. At that point in

1 time, 71 percent of the value for these contracts, or
2 \$106,433,780, was irrevocably committed, not including
3 transmission construction costs, other owner's costs and
4 Allowance for Funds Used During Construction ("AFUDC").

5
6 Construction of Bayside CTs 5 and 6 was in the final
7 stages during the rate case hearing and was completed
8 and in service before the Commission issued Order 09-
9 0283 on April 30, 2009. In addition, Tampa Electric was
10 able to meet its summer peak demand in 2009 with Bayside
11 CTs 5 and 6 in service. The completion of Bayside CTs 5
12 and 6 was the only realistic and reliable option.

13
14 Additionally, postponement of Bayside CTs 3 and 4, which
15 went into service July 13, 2009, was not a realistic or
16 reliable alternative, nor would it have been consistent
17 with Tampa Electric's Ten-Year Site Plan. As previously
18 stated, the majority of funds for contracts on these CTs
19 were committed and substantial construction had been
20 completed at the time of the rate case hearing. Also,
21 the postponement of Bayside CTs 3 and 4 would have
22 eliminated the benefits of 120 MW of black start and
23 quick start capability, thereby requiring additional
24 spinning reserves and increasing fuel costs to
25 customers. Therefore, postponement of Bayside CTs 3 and

1 4 was not a cost effective option.

2

3 Postponement of Big Bend CT 4 was not a realistic or
4 reliable option because postponement would have left Big
5 Bend Station without black start capability, which is
6 the ability to start a unit independent of an energized
7 connection to the bulk electric system such as in a
8 blackout condition. The North American Electric
9 Reliability Corporation ("NERC") requires Tampa Electric
10 to maintain sufficient black start generator capability
11 to initiate restoration of the power system or to make
12 contractual arrangements with others to provide that
13 restoration capability. Further, the postponement of
14 Big Bend CT 4 would have caused the loss of 60 MW of
15 quick start capability. Big Bend CT 4 also has the
16 capability to operate either on natural gas or fuel oil.
17 This dual fuel capability is beneficial in situations
18 when the supply of natural gas is limited or where the
19 price of natural gas is higher than distillate oil. The
20 capability to use oil as a fuel was cost effectively
21 applied to Big Bend CT 4 by using an existing oil tank
22 and associated equipment that was already in service at
23 the facility. As previously discussed, Tampa Electric
24 was able to take advantage of Big Bend CT 4's dual fuel
25 capability during the sustained cold weather period in

1 January 2010.

2
3 **Q.** Aside from supporting Tampa Electric's minimum 20
4 percent planning reserve margin criterion, please
5 describe in greater detail the operating characteristics
6 provided by the five CTs and their role in meeting load
7 generation needs.

8
9 **A.** The five CTs are providing needed generating capacity
10 and operating flexibility with a high level of efficient
11 and environmentally beneficial performance. The heat
12 rate of the CTs is approximately four to nine percent
13 lower than the next peaking unit in Tampa Electric's
14 dispatch order, making the CTs Tampa Electric's most
15 efficient peaking units. These units have greater
16 operating flexibility; they can start multiple times per
17 day while requiring no minimum run time or off time
18 between starts, thereby providing maximum dispatch
19 flexibility and overall system optimization. In
20 addition to meeting the peak demands of our customers,
21 the five CTs will produce an estimated 2009 and 2010
22 fuel savings of \$4 million through the displacement of
23 other units that would otherwise be operated or more
24 expensive and less reliable power purchases in lieu of
25 the five CTs.

1 **Q.** Please describe the quick start operating characteristic
2 of the CTs and associated benefits from a load
3 generation perspective.

4
5 **A.** The five CTs have quick start capability, which enables
6 these units to go from off-line to full load within 10
7 minutes. As a member of the Florida Reserve Sharing
8 Group, Tampa Electric has an operating reserve
9 requirement that the reserve megawatts must be fully
10 available to support reliability of the bulk electric
11 system within 10 minutes of being called upon. The
12 quick start feature of the CTs provides a far more
13 economical option to meet the company's operating
14 reserve obligation than through the use of spinning
15 reserves. Typically, spinning reserves are provided by
16 keeping larger base and intermediate-load units running
17 at less efficient load points. The use of quick start,
18 peaking CTs to provide operating reserves in lieu of
19 using spinning reserves benefits customers by enabling
20 in-service generators to operate at higher average
21 outputs, which improves efficiency. This lowers the
22 overall system fuel and operating costs. In addition,
23 the use of the quick start capable CTs for operating
24 reserves rather than using demand-side load management
25 curtailments is a less impactful alternative which

1 limits the need to interrupt customer electrical service
2 in such circumstances.

3
4 **Q.** Please describe the black start operating characteristic
5 of the CTs and associated reliability benefits from a
6 load generation perspective.

7
8 **A.** The CTs have black start capability which will allow
9 each CT to start independent of an energized connection
10 to the bulk electric system. A relatively small, on-
11 site engine driven generator can provide the electric
12 power required to start these units. Once the CT has
13 been started, energy can be switched internally to power
14 the auxiliaries required to start a larger generating
15 unit at the station. This generation can be used to re-
16 energize the electric grid to provide power to Tampa
17 Electric customers without waiting for an external
18 source from another electric utility. This black start
19 capability allows for faster restoration of electric
20 service to customers following hurricanes or other major
21 system disturbances, especially in situations where the
22 outage is so widespread that imported startup power is
23 difficult to locate or even non-existent.

24
25 **Cost of the Five CTs**

1 Q. What is the actual total cost of the five CTs?

2

3 A. The total cost for the five CTs is projected to be
4 \$201,464,580 (system), of which over 99 percent are
5 actual costs incurred through March 31, 2010. This is
6 \$13,286,156 (jurisdictional) greater than the
7 \$188,178,425 (jurisdictional) included in Tampa
8 Electric's rates as of January 2010.

9

10 Q. How were these costs derived?

11

12 A. They were derived from the books and records of the
13 company as maintained in the normal course of business.

14

15 Q. What steps did Tampa Electric take to ensure that the
16 costs it incurred with respect to the five CTs were
17 reasonable and prudent?

18

19 A. As previously discussed, Tampa Electric routinely
20 utilizes RFPs to ensure the selection of equipment,
21 supplies and services are the most cost effective
22 alternatives available. Tampa Electric issued 30 RFPs
23 during the construction of the CTs. In addition, a
24 project manager and project team were formed to oversee
25 all contractor activity, achievement of project

1 milestones, and management of project costs to ensure
2 the costs incurred by the company were reasonable and
3 prudent. For example, major equipment deliveries were
4 coordinated to coincide with the completion of equipment
5 foundations to avoid double-handling of equipment.
6 Also, construction schedules were developed to move from
7 the installation of the first two Bayside CTs, to the
8 second pair of Bayside CTs and finally to the last Big
9 Bend CT. This minimized mobilization costs which Tampa
10 Electric would have incurred if there were large gaps
11 between the construction dates.

12
13 **Q.** Please summarize your testimony.

14
15 **A.** My testimony proves that Tampa Electric has satisfied
16 the three conditions relating to the addition of the Big
17 Bend rail facility and five CTs as required in Order No.
18 09-0283 in Docket No. 080317-EI. The Big Bend rail
19 facility and five CTs were completed and placed into
20 commercial operation on or before December 31, 2009 as
21 required and the appropriate documentation has been
22 provided by the company to confirm the commercial in-
23 service date of each asset. As of March 31, 2010,
24 494,242 tons of coal have been received and unloaded at
25 the rail facility since being declared commercially

1 operational on December 16, 2009, further demonstrating
2 commercial operation of the facility. In addition, the
3 five CTs were placed into commercial operation between
4 April 20, 2009 and August 26, 2009 and the Commission
5 Staff verified the in-service dates of the units,
6 thereby concluding in Order No. 09-0842 that Tampa
7 Electric has met the condition of Order No. 09-0283 that
8 the five CTs were actually in service during 2009.

9
10 The final condition in Order No. 09-0283 requires that
11 there must be a continued need of the five CTs for load
12 generation. My testimony demonstrates the ongoing need
13 for and value of the CTs. As discussed extensively
14 above, the continuing need for the CTs was reinforced
15 during the company's winter peak period in January 2010,
16 when they were used extensively to meet peak demand,
17 respond to rapidly increasing customer demand and avoid
18 blackouts or interruptions to customers. During the
19 extended cold weather period, the CTs were started 41
20 times and they operated at a 20 percent capacity factor,
21 which is significantly higher than the typical peaking
22 unit capacity. In addition, the quick start and rapid
23 loading capability of the CTs was used multiple times
24 during the cold January weather. Without the CTs in
25 service, Tampa Electric would not have been able to meet

1 record-breaking peak demands without interrupting
2 customers as other state IOUs were forced to do in order
3 to meet customer demand.

4
5 Therefore, my testimony substantiates that the Big Bend
6 rail facility and the five CTs were indeed complete and
7 operational prior to December 31, 2009 and that there is
8 a continuing need for the CTs. Based on the extensive
9 details and facts provided above, Tampa Electric has met
10 the conditions set forth in 09-0283 in Docket No.
11 080317-EI for the implementation of the \$25,742,209 step
12 increase approved in Order No. 09-0842 on a permanent
13 basis.

14

15 **Q.** Does this conclude your direct testimony?

16

17 **A.** Yes, it does.

18

19

20

21

22

23

24

25

TAMPA ELECTRIC COMPANY
DOCKET NO. 090368-EI
WITNESS: HORNICK

EXHIBIT

OF

MARK J. HORNICK

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DOCUMENT NO.	TITLE	PAGE
1	Big Bend Rail Facility In-Service Certification	36
2	Big Bend Rail Facility Photographs	37
3	Bayside & Big Bend CT Photographs	42
4	Aero CT Performance Data	43



MEMORANDUM

DATE: December 16, 2009
TO: Big Bend Station Team Members/Support Groups
FROM: Jim Robertson
SUBJECT: Big Bend Rail Unloading Facility COMMERCIAL OPERATIONS

The Big Bend Station Rail Unloading Facility has commenced its commercial operation effective December 16, 2009 12:01 a.m. The Big Bend Station Coal Field team which has the responsibility for operating and maintaining Big Bend Solid Fuel Delivery Systems has accepted the project into the normal operations of the plant.

All costs associated with the operations of the Unloading Facility including costs relating to plant staff and operating personnel should now be charged to the proper operations and maintenance accounts.

For all costs associated with final construction activities such as punch list items, engineering, and processing of payments to close out the project, account "H29" will remain open to those charges through March 16, 2010. Any new capital qualifying projects will require approval under the standard capitalization criteria used within Tampa Electric.

Project Management



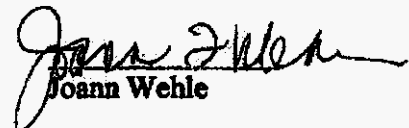
Jim Robertson

Plant Operations



Bill Smotherman

Fuels

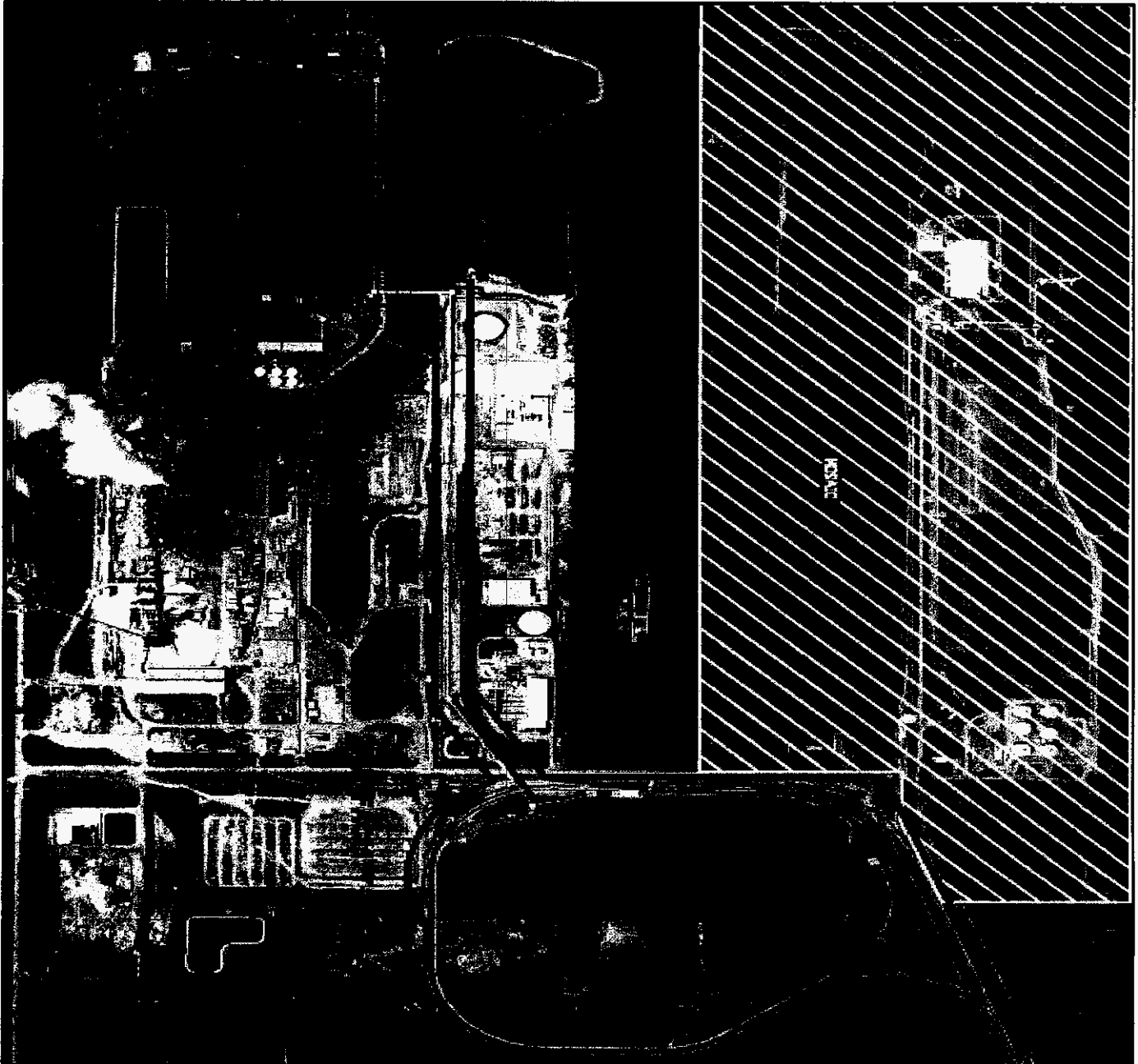


Joann Wehle

Cc: E.L. Carlson
 J. S. Chronister
 T. L. Hernandez
 M.J. Hornick
 B.N. Narzissenfeld
 V.C. Strickland
 R.A. Walker

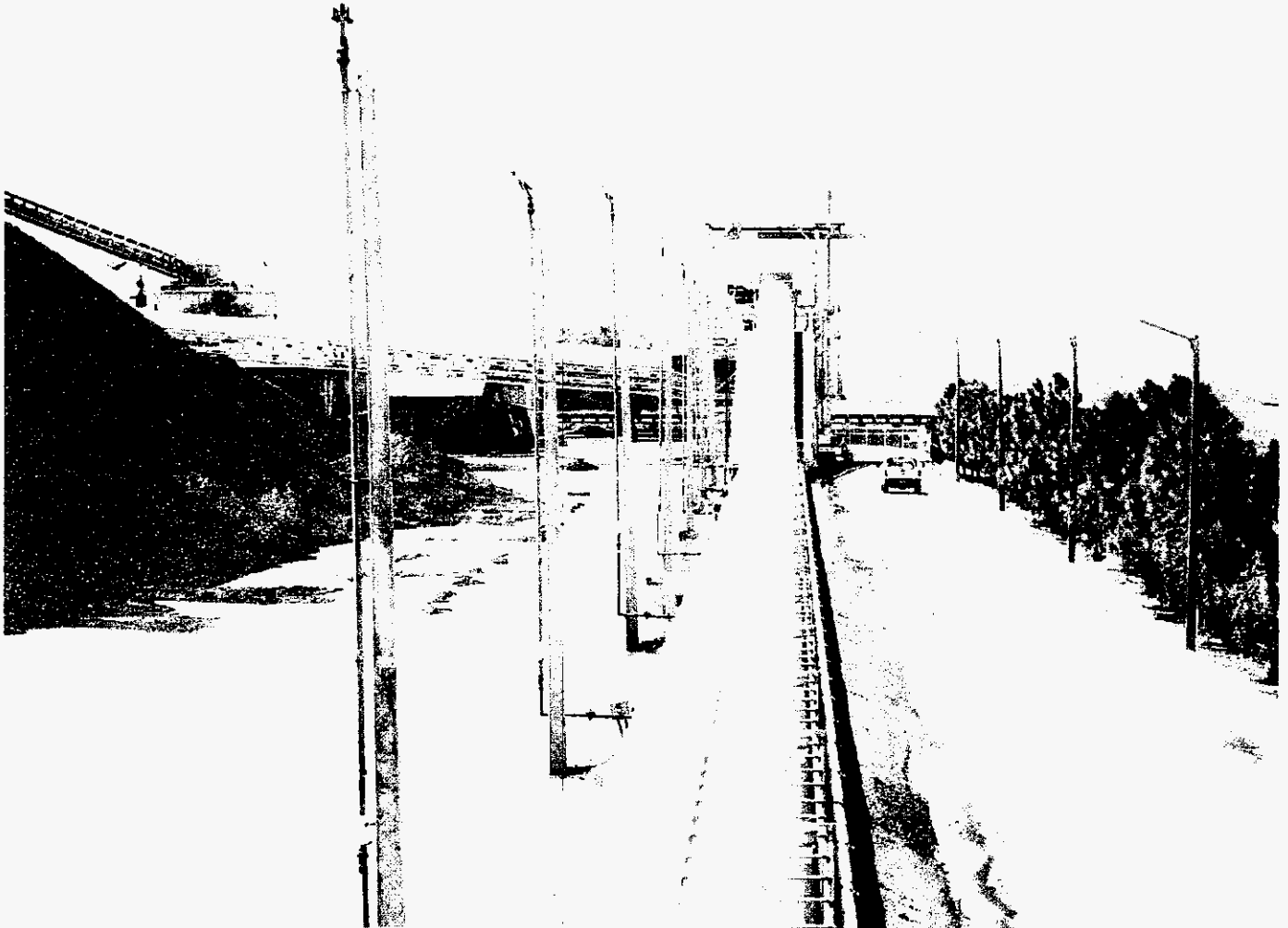
TAMPA ELECTRIC COMPANY
DOCKET NO. 090368-EI
EXHIBIT NO. _____ (MJH-1)
WITNESS: HORNICK
DOCUMENT NO. 2
PAGE 1 OF 5

Aerial Photograph of Big Bend and Rail Facility Track Outline



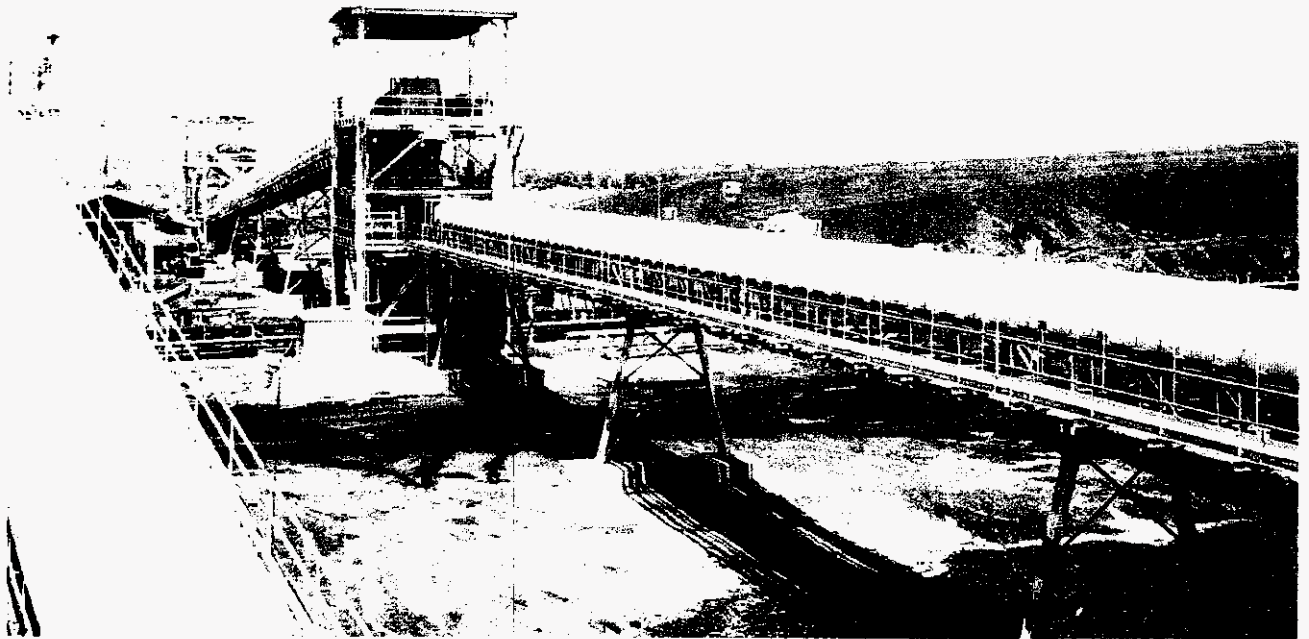
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Big Bend Rail Facility Conveyor 14 Looking West



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Big Bend Rail Facility Conveyors 15 and 16 Looking North



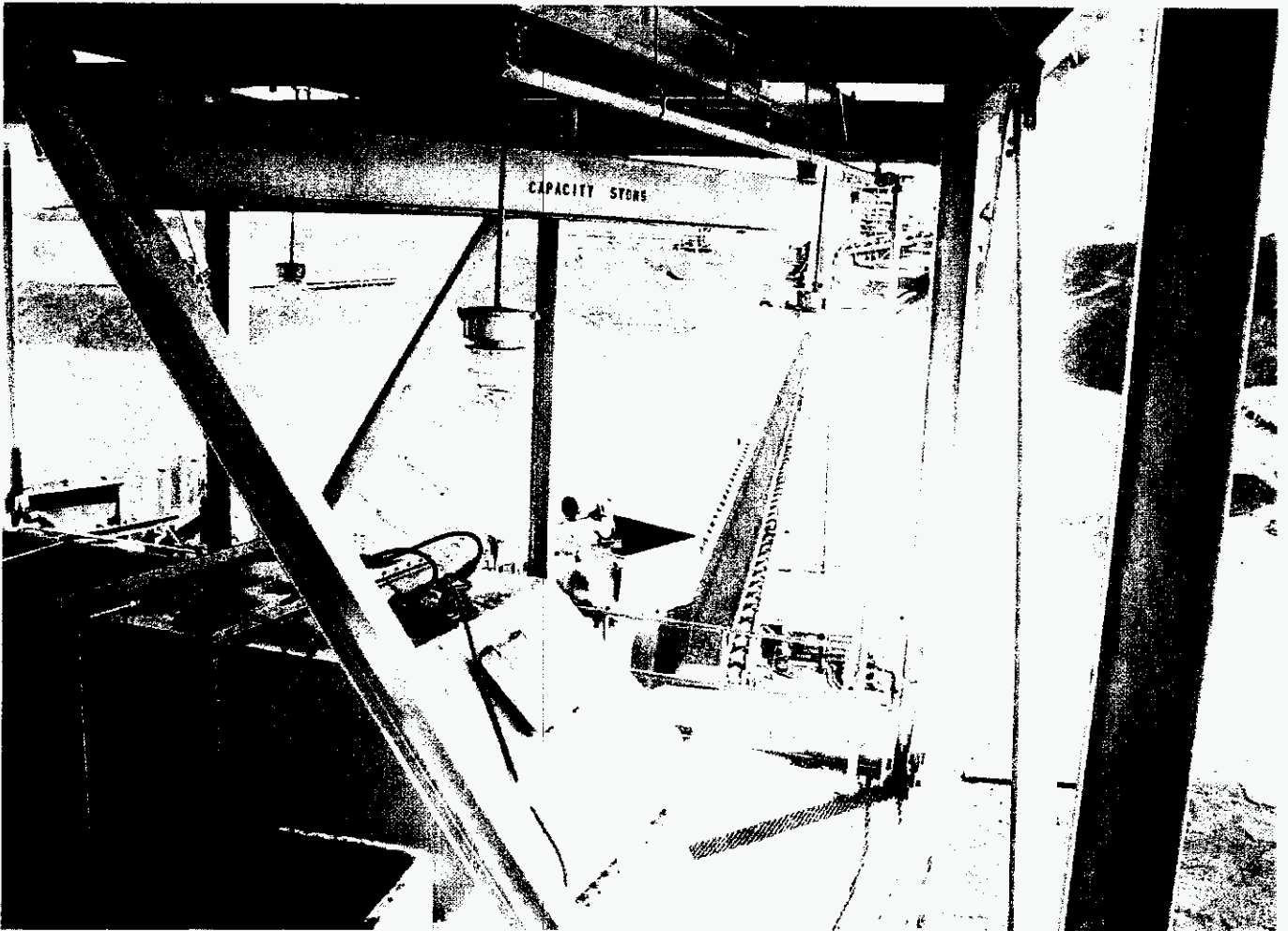
TAMPA ELECTRIC COMPANY
DOCKET NO. 090368-EI
EXHIBIT NO. _____ (MJH-1)
WITNESS: HORNICK
DOCUMENT NO. 2
PAGE 4 OF 5

**Big Bend Rail Facility Conveyor 13
Enclosed Conveyor Over Inlet Canal**



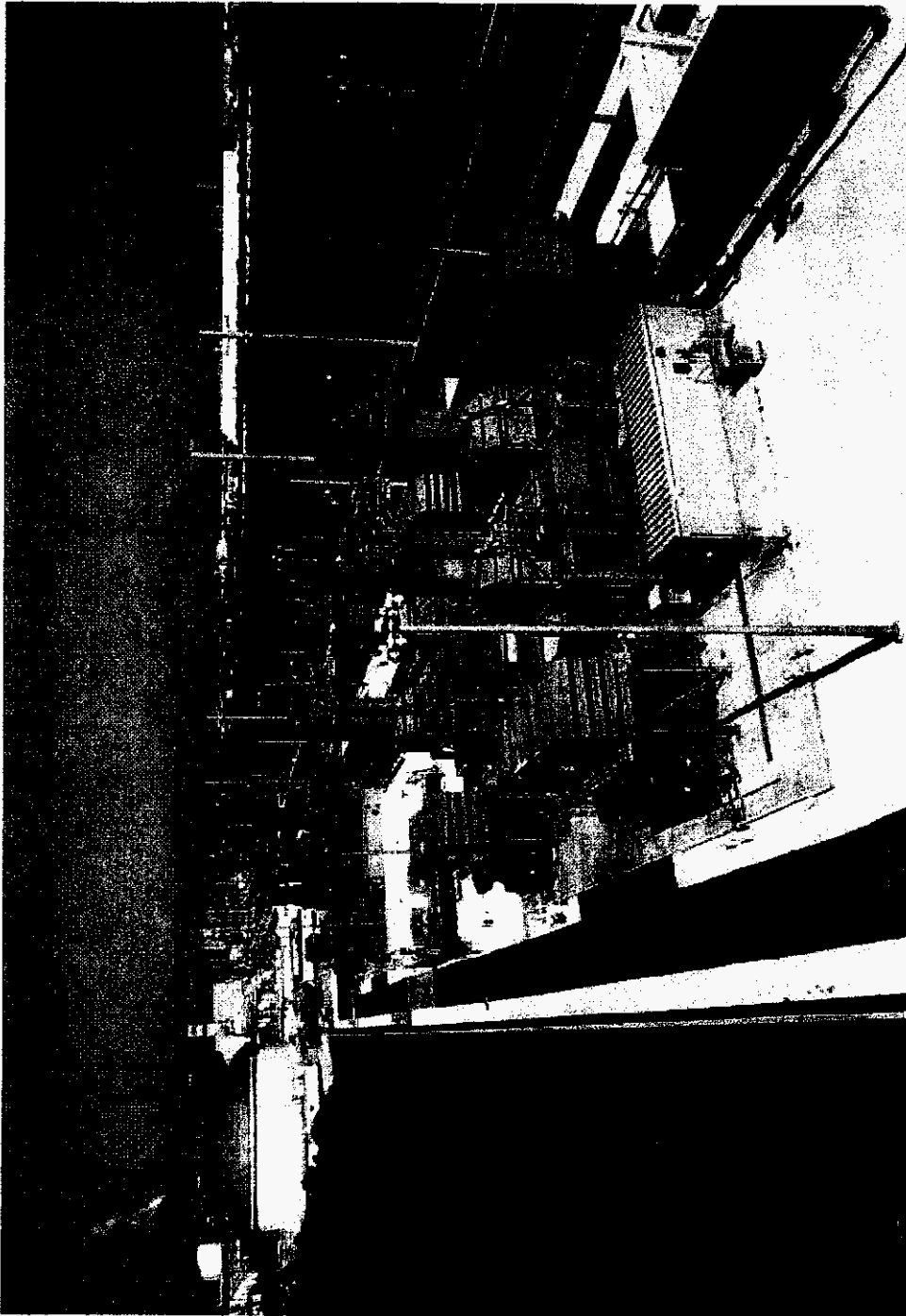
TAMPA ELECTRIC COMPANY
DOCKET NO. 090368-EI
EXHIBIT NO. _____ (MJH-1)
WITNESS: HORNICK
DOCUMENT NO. 2
PAGE 5 OF 5

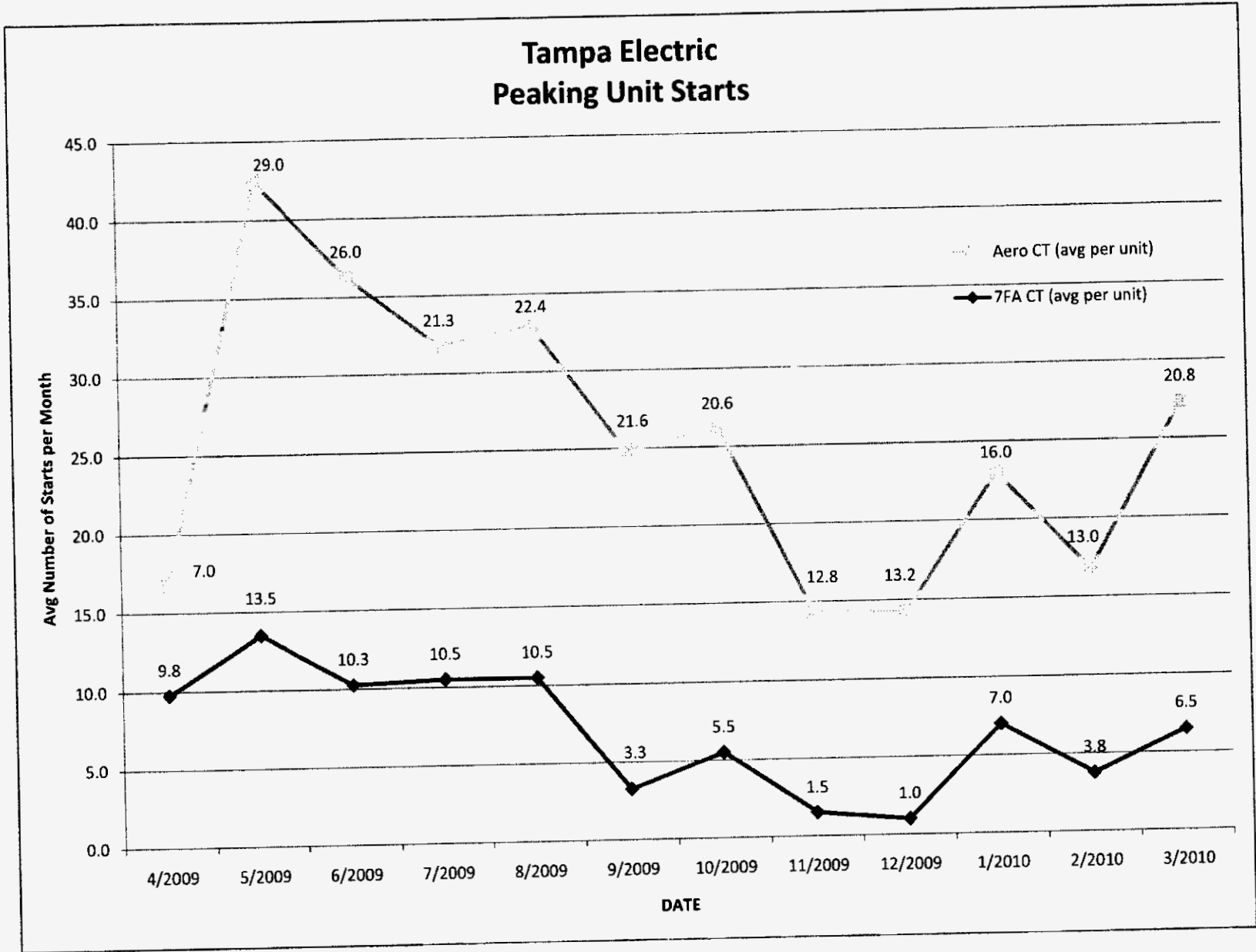
Big Bend Rail Facility Discharge of New Conveyor 16



TAMPA ELECTRIC COMPANY
DOCKET NO. 090368-EI
EXHIBIT NO. _____ (MJH-1)
WITNESS: HORNICK
DOCUMENT NO. 3
PAGE 1 OF 1

Bayside Aero CTs Three through Six







BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 090368-EI
IN RE: REVIEW OF THE CONTINUING NEED AND
COSTS ASSOCIATED WITH TAMPA ELECTRIC
COMPANY'S FIVE COMBUSTION TURBINES AND BIG
BEND RAIL FACILITY

TESTIMONY AND EXHIBIT
OF
WILLIAM R. ASHBURN

DOCUMENT NUMBER-DATE

03608 APR 30 2

FPSC-COMMISSION CLERK

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **PREPARED DIRECT TESTIMONY**

3 **OF**

4 **WILLIAM R. ASHBURN**

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

8
9 **A.** My name is William R. Ashburn. My business address is
10 702 North Franklin Street, Tampa, Florida 33602. I am
11 the Director, Pricing and Financial Analysis for Tampa
12 Electric Company ("Tampa Electric" or "the company").

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

16
17 **A.** I graduated from Creighton University with a Bachelor of
18 Science degree in Business Administration. Upon
19 graduation, I joined Ebasco Business Consulting Company;
20 my consulting assignments included the areas of cost
21 allocation, computer software development, electric
22 system inventory and mapping, cost of service filings
23 and property record development. I joined Tampa
24 Electric in 1983 as a Senior Cost Consultant in the
25 Rates and Customer Accounting Department. At Tampa

1 Electric, I have held a series of management positions
2 with responsibility for embedded and marginal cost of
3 service studies, rate filings, rate design,
4 implementation of new conservation and marketing
5 programs, customer surveys and various state and federal
6 regulatory filings. In March 2001, I was promoted to my
7 current position of Director, Pricing and Financial
8 Analysis in Tampa Electric's Regulatory Affairs
9 Department. I am a member of the Rate and Regulatory
10 Affairs Committee of the Edison Electric Institute and
11 the Rate Committee of the Southeastern Electric
12 Exchange.

13
14 **Q.** Have you testified previously?

15
16 **A.** Yes. I have testified or filed testimony before the
17 Florida Public Service Commission ("FPSC" or
18 "Commission") in several dockets. I testified for Tampa
19 Electric in Docket No. 000061-EI regarding the company's
20 Commercial/Industrial Service Rider tariff and in Docket
21 No. 020898-EI regarding a self-service wheeling
22 experiment. In Docket Nos. 000824-EI, 001148-EI,
23 010577-EI and 020898-EI, I testified for Tampa Electric
24 and as a joint witness representing Tampa Electric,
25 Florida Power & Light Company and Progress Energy

1 Florida Inc. regarding rate and cost support matters
2 related to the GridFlorida proposals. Most recently, I
3 testified in Docket No. 080317-EI supporting Tampa
4 Electric's cost of service methodology and rate design
5 in the company's base rate proceeding. In addition, I
6 have testified or presented for Tampa Electric numerous
7 times at workshops and in other proceedings regarding
8 rate, cost of service and related matters. I have also
9 provided testimony and represented Tampa Electric before
10 the Federal Energy Regulatory Commission in rate and
11 cost of service matters.

12
13 **Q.** Please state the purpose of your direct testimony?

14
15 **A.** The purpose of my testimony is to present the revenue
16 allocation and resulting rates designed to recover the
17 step increase approved in Order No. PSC-09-0283-FOF-EI
18 ("Order No. 09-0283") in Docket No. 080317-EI, issued
19 April 30, 2009. The step increase revenue requirement
20 approved in Order No. PSC-09-0842-PCO-EI ("Order No. 09-
21 0842"), issued on December 22, 2009, is associated with
22 the costs incurred by Tampa Electric to construct five
23 combustion turbine ("CT") generating units and a solid
24 fuel rail unloading facility ("rail facility") at Big
25 Bend Power Station. Additionally, I support the final

1 approval of the step increase tariff sheets on a
2 permanent basis.

3

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

6

7 **A.** Yes, I have. My Exhibit No. __ (WRA-1), consisting of
8 five documents, was prepared by me or under my direction
9 and supervision.

10

11 **Q.** Has the step increase approved in Order No. 09-0283 been
12 implemented?

13

14 **A.** Yes. Following the issuance of Order No. 09-0283 and
15 Order No. PSC-09-0571-FOF-EI, disposing of motions for
16 reconsideration of Order No. 09-0283, the Commission
17 opened this docket as a means of implementing the step
18 increase as approved in Order No. 09-0283. Tampa
19 Electric filed a petition in this docket on October 12,
20 2009 for approval of the step increase tariff sheets and
21 resulting rates. On December 1, 2009, the Commission
22 voted to approve the implementation of the step increase
23 effective January 1, 2010 in the amount of \$25,742,209,
24 subject to refund with interest pending the outcome of
25 an evidentiary hearing. Tampa Electric implemented the

1 step increase rates subject to refund as approved in
2 Order No. 09-0842.

3
4 **Revenue Requirement**

5 **Q.** How was the revenue requirement for the CTs to be
6 recovered in the step increase determined?

7
8 **A.** In its rate case proceeding, Tampa Electric proposed
9 making a pro forma adjustment for the impact on
10 operating expenses as well as impact on net plant in
11 service to bring the company's total cost profile to an
12 amount that reflects a full year of operation for the
13 CTs. That proposed pro forma adjustment included
14 jurisdictional net operating income adjustments of
15 decreases of \$2,352,000 for the May units and \$4,864,000
16 for the September units. The proposed jurisdictional
17 rate base adjustments were increases of \$36,125,000 for
18 the May units and \$94,562,000 for the September units.

19
20 In Order No. 09-0283, rather than make the proposed pro
21 forma adjustment as part of the initial rate increase,
22 the Commission decided to reflect the increased revenue
23 requirements for the CTs, \$26,554,650, in a step
24 increase to become effective January 1, 2010, if the CTs
25 were in service by December 31, 2009 and needed for load

1 generation. These conditions and proof that they have
2 been met are discussed and provided in the direct
3 testimony of Tampa Electric witness Mark J. Hornick.

4
5 In the reconsideration order, the revenue requirement
6 for the CTs in the step increase was revised upward to
7 \$26,938,806. This revised value was subsequently
8 changed to \$18,603,935 in Order No. 09-0842 to reflect
9 reduced projected final costs for the CTs and was used
10 to develop the step increase rates now in effect.

11
12 **Q.** How was the revenue requirement for the rail facility to
13 be recovered in the step increase determined?

14
15 **A.** In its rate case proceeding, Tampa Electric proposed a
16 pro forma adjustment for the impact on operating
17 expenses as well as impact on net plant in service to
18 bring the company's total cost profile to an amount that
19 reflects a full year of operation for the rail facility.
20 The proposed pro forma adjustment included an impact on
21 operating expenses as well as an impact on net plant in
22 service to bring the company's total cost profile to an
23 amount that reflects a full year of operation for the
24 facility. The jurisdictional net operating income
25 adjustment was a decrease of \$1,195,000. The

1 jurisdictional rate base adjustment was an increase of
2 \$44,754,000.

3
4 In Order No. 09-0283, rather than make the proposed pro
5 forma adjustment as part of the initial rate increase,
6 the Commission decided to reflect the increased revenue
7 requirements for the rail facility, \$7,006,720, in a
8 step increase to become effective January 1, 2010, if
9 the rail facility was in service by December 31, 2009.
10 In the reconsideration order, the revenue requirement
11 for the rail facility in the step increase was revised
12 upward to \$7,138,274. This revised value was not
13 changed in Order No. 09-0842 and was used to develop the
14 step increase rates now in effect.

15
16 The \$7,138,274 for the rail facility, together with the
17 \$18,603,935 for the five CTs, totals \$25,742,209, which
18 is the approved amount for the step increase.

19
20 **Q.** How was the total step increase annual operating revenue
21 increase resulting from the inclusion of the rail
22 facility and CTs in rate base derived?

23
24 **A.** As shown in Document No. 1 of my Exhibit No. ___ (WRA-1),
25 the total annual operating revenue increase of

1 \$25,742,209 associated with the CTs and rail facility
2 was derived in the same manner as it was derived by the
3 Commission in Order No. 09-0842. The authorized overall
4 rate of return of 8.29 percent resulting from Order No.
5 09-0283 was applied to the net plant in service values
6 for the CTs and rail facility. The resulting required
7 return amount was added to the approved and tax effected
8 O&M expense, depreciation and taxes other than income
9 associated with the CTs and rail facility. The income
10 tax effect of interest was added to all the above, which
11 derived the total net operating income ("NOI")
12 requirement. The company then applied the approved NOI
13 multiplier to the NOI requirement as the final step in
14 the calculation of the revenue requirement for the CTs
15 and rail facility. The reasonableness of the costs of
16 the CTs and rail facility described above is described
17 in the direct testimony of Tampa Electric witness Mark
18 J. Hornick.

19
20 **Q.** What is the appropriate total annual revenue requirement
21 for the rail facility?

22
23 **A.** As shown in Document No. 1 of my Exhibit No. ___ (WRA-1),
24 the appropriate total annual revenue requirement for the
25 rail facility is \$7,230,216, which reflects the combined

1 revenue requirement of the initial rate increase and
2 step increase.

3
4 **Q.** What is the appropriate total annual revenue requirement
5 for the CTs?

6
7 **A.** As shown in Document No. 1 of my Exhibit No. ___ (WRA-1),
8 the appropriate total annual revenue requirement for the
9 May CTs is \$17,546,357 and for the September CTs is
10 \$18,507,502 for a total of \$36,053,859, which reflects
11 the combined revenue requirement of the initial rate
12 increase and step increase.

13
14 **Revenue Allocation**

15 **Q.** Did the Commission provide guidance on how the step
16 increase revenue requirement was to be allocated to rate
17 classes?

18
19 **A.** Yes. Order No. 09-0283, at pages 6 and 9, prescribes
20 the following parameters for revenue allocation of the
21 step increase:

22
23 We authorize an increase in base rates . . .
24 consistent with the cost allocation
25 methodology we approved in this order . . .

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On page 127 of Order No. 09-0283, it states:

In order to retain the relative class relationships developed in the current cost of service study, the incremental costs shall first be allocated to each rate class, consistent with the 12 CP and 25 percent AD cost methodology approved herein.

Q. Did Tampa Electric follow these guidelines when it allocated revenues for the step increase?

A. Yes. The revenue allocation for the step increase was derived consistent with the Commission's direction. The CTs and rail facility are production or production-related facilities. Consistent with the cost allocation methodology approved in Order No. 09-0283, the step increase revenue requirement was allocated based on the 12 CP and 25 percent allocation factor utilized for such facilities. This approach results in a fair allocation of the increase revenues to all rate classes that are benefiting from these facilities.

Q. Does the Interruptible Service ("IS") class of customers particularly benefit from these facilities?

1 **A.** Yes. The company's IS customers take service under a
2 demand-side management program and are subject to
3 interruption or allocation of purchased power costs when
4 generation is not sufficient to meet their load
5 requirements. The addition of the five CTs during 2009
6 provided additional peaking generating resources which
7 reduced the likelihood of such interruption as soon as
8 the units went into service and will continue to reduce
9 the likelihood of interruption in the future. Thus, the
10 five CTs provide a real benefit to IS customers through
11 continuation of service at peak times. Tampa Electric
12 witness Mark J. Hornick discusses the extensive use of
13 the five CTs during the record-breaking winter demand
14 days in January 2010 to help prevent interruptions and
15 curtailment of firm load in his direct testimony.

16
17 Additionally, the rail facility provides a second mode
18 of fuel delivery, which will not only improve the
19 reliability of fuel delivery to Big Bend, but also adds
20 competition for sources of coal and downward pressure on
21 coal prices. IS customers are generally higher load
22 factor customers who will benefit particularly from this
23 improvement in two ways: improved fuel delivery
24 reliability will reduce the risk of interruption in all
25 hours and higher load factor customer are taking service

1 more hours of the year, and the higher energy use of the
2 higher load factor IS customers will reduce their
3 overall cost per kWh because the expected lower fuel
4 costs resulting from this investment represents a higher
5 percentage of their overall bill. Thus, the addition of
6 the CTs and rail facility provides significant benefits
7 to the IS customers which is why their class of service
8 is appropriately allocated a share of the revenue
9 requirement associated with these facilities going into
10 service.

11
12 **Q.** Did you prepare an exhibit that demonstrates how the
13 step increase revenues were allocated to rate classes as
14 required by the Commission?

15
16 **A.** Yes. Document No. 2 of my Exhibit No. ___ (WRA-1) shows
17 how the increased revenues were allocated to the rate
18 classes and the derivation of the target total revenues
19 which were utilized for rate design.

20
21 **Q.** Does the allocation of the step increase to rate classes
22 take into account the customer group transfers and
23 combinations as approved in Order No. 09-0283?

24
25 **A.** Yes. As approved in Order No. 09-0283, certain customer

1 groups were transferred between rate classes or combined
2 into a single rate class. Because these transfers
3 occurred in May 2009 and the rates resulting from the
4 step increase became effective in January 2010, Tampa
5 Electric factored in the transfers and combinations
6 before revenue allocation occurred to clearly
7 demonstrate the final revenue and rate impacts on the
8 MFRs utilized to confirm the final results. A schedule
9 showing how the transfers and combinations were factored
10 into the revenue allocation is included as Document No.
11 3 of my Exhibit No. (WRA-1).

12
13 **Q.** Do the tariffs currently in effect generate sufficient
14 revenues to permit Tampa Electric to recover all of its
15 costs associated with the five CTs and rail facility?
16

17 **A.** No. Following the opening of this docket as a vehicle
18 for implementing the step increase, the Commission Staff
19 completed an audit to verify the capital costs for the
20 five CTs and rail facility. Based on that audit, the
21 Commission Staff recommended a lower step increase
22 amount to reflect the lower actual/estimated cost of the
23 CTs than originally projected. However, the Commission
24 Staff did not recommend an offset to that reduction to
25 reflect the actual cost of the rail facility, which was

1 higher than the estimate used by the Commission in
2 establishing the step increase. That revised revenue
3 amount, \$25,742,209, was approved by the Commission, as
4 reflected in Order No. 09-0842 and is the amount Tampa
5 Electric allocated and used for rate design. It is also
6 the basis for the tariffs sheets for which Tampa
7 Electric is requesting approval.

8
9 **Rate Design**

10 **Q.** How were the resulting rates derived after the
11 allocation of revenues to each rate class?

12
13 **A.** Order No. 09-0283, at page 127, includes the following
14 requirement regarding the resulting rate design:

15
16 Once the dollar increase per class is
17 established, the base rate energy, or
18 energy and demand charges, shall be
19 increased by the percentage increase in
20 class revenues. In addition, non-clause
21 recoverable credits shall also be
22 increased by a similar amount to retain
23 the relationship between the charges and
24 credits approved in the current cost
25 study.

1 The rate design for the rates currently in effect
2 followed the direction provided in Order No. 09-0283, as
3 described above. The base rate energy and demand
4 charges as well as all associated credits and charges in
5 each rate class were increased based on the percentage
6 increase of that class's allocated revenue, resulting in
7 revised charges and credits. The resulting revised
8 charges and credits are shown in Document No. 4 of my
9 Exhibit No. __ (WRA-1) and in the tariff sheets.

10
11 **Q.** Was this procedure followed for all charges and credits?

12
13 **A.** In general yes. Certain of the charges or credits did
14 not change under the methodology as the percentage
15 increase in class revenues was not sufficient to change
16 the rate by as much as a penny. In such cases, the
17 existing rate was retained.

18
19 **Tariff Sheets**

20 **Q.** What tariff sheets are you requesting Commission
21 approval of in this proceeding?

22
23 **A.** I am requesting that the Commission approve the
24 continuation of the tariff sheets currently in effect,
25 copies of which are contained in Document No. 5 of my

1 Exhibit No. __ (WRA-1).

2

3 **Q.** When were these tariff sheets filed and approved?

4

5 **A.** The tariff sheets were filed by the company on December
6 2, 2009 and administratively approved by the Commission
7 Staff, as provided for in Order No. 09-0842, on December
8 7, 2009. The tariff sheets went into effect for the
9 first billing cycle in January 2010 subject to refund.

10

11 **Q.** What revenue requirement amount is being recovered in
12 the tariff sheet currently in effect?

13

14 **A.** As previously stated, the rates contained in the tariff
15 sheets are designed to recover the \$25.74 million step
16 increase revenue requirement as approved in Order No.
17 09-0842.

18

19 **Q.** Do the tariff sheets comply with Order No. 09-0283,
20 which requires that the costs of the five CTs and Big
21 Bend rail facility be allocated to rate classes
22 consistent with the approved cost of service
23 methodology?

24

25 **A.** As previously discussed, yes they do comply with Order

1 No. 09-0283.

2

3 **Q.** Are the rates contained in the tariff sheets the same
4 rates you describe above in your direct testimony?

5

6 **A.** Yes. They reflect the appropriate revenue allocation
7 and rate design per Order No. 09-0283, at page 127.

8

9 **Mechanism for Refund**

10 **Q.** Does Tampa Electric request any specific mechanism to
11 address refunds, if any, that may be ordered by the
12 Commission?

13

14 **A.** Tampa Electric does not believe that any refunds are
15 appropriate as a result of this proceeding, especially
16 given that the company's actual cost incurred for the
17 CTs and rail facility is greater than the amount
18 approved for recovery in retail rates. However, should
19 the Commission determine that refunds are called for,
20 Tampa Electric does recommend certain specifications
21 associated with refunding that will facilitate
22 appropriate refunding while minimizing the cost and
23 avoid the need for substantial programming work to
24 accomplish the task.

25

1 First, the company proposes that all refunds made, if
2 any, should be applied only to active bills at the time
3 the refunds are being made. Second, since the step
4 increase was implemented with Cycle 1 billing for
5 January 2010, the company proposes that any refund also
6 commence on Cycle 1 billing one month following the date
7 of the order regarding such refund. If that date is
8 within the time period when another rate change is to be
9 made, for example when the annual adjustment clauses are
10 going into effect, it would facilitate the programming
11 to make the change at that time. Third, the refund
12 mechanism should be based on an energy rate (cents/kWh)
13 basis for all applicable customers. An energy rate
14 based refund mechanism is currently programmed into the
15 company's billing system and is an appropriate manner to
16 apply the refund comparable to how the charges were
17 first applied.

18
19 **Summary**

20 **Q.** Please summarize your testimony?

21
22 **A.** My direct testimony describes Tampa Electric's
23 implementation of the step increase associated with the
24 company's addition of the five CTs and Big Bend rail
25 facility. The step increase, effective January 1, 2010,

1 was approved in Order No. 09-0842 and is subject to
2 refund with interest pending the outcome of the
3 evidentiary hearing. I explain that 1) the \$25,742,209
4 total annual operating revenue increase was derived in
5 the same manner as it was by the Commission in Order No.
6 09-0842; and, 2) the step increase revenue was allocated
7 to rate classes in a manner consistent with the cost
8 allocation methodology prescribed by the Commission in
9 Order No. 09-0283, which was the final order in the
10 company's most recent rate proceeding. I then describe
11 the benefits that flow to interruptible customers as a
12 result of the addition of the five CTs and rail
13 facility.

14
15 I sponsor an exhibit showing how the step increase
16 revenues were allocated to rate classes as required by
17 the Commission, taking into account customer group
18 transfers and combinations approved in Order No. 09-0283.
19 I further describe the shortfall in approved revenues
20 because of the additional costs of the CTs and rail
21 facility not included in the step increase.

22
23 With respect to rate design, I describe the company's
24 derivation of rates in a manner that complies with the
25 directions set forth in Order No. 09-0283. I sponsor

1 tariff sheets that were approved in Order No. 09-0842,
2 explain their compliance with Order No. 09-0283 and
3 request that the tariff sheets be approved for continuing
4 application at the conclusion of this proceeding.
5 Finally, although Tampa Electric believes that no refunds
6 are appropriate as a result of this proceeding, I
7 describe the most appropriate method for making refunds,
8 if any, in the event they are required by the Commission.

9
10 **Q.** Does this conclude your testimony?

11
12 **A.** Yes.
13
14
15
16
17
18
19
20
21
22
23
24
25

TAMPA ELECTRIC COMPANY
DOCKET NO. 090368-EI
WITNESS: ASHBURN

EXHIBIT

OF

WILLIAM R. ASHBURN

TAMPA ELECTRIC COMPANY
DOCKET NO. 090368-EI
EXHIBIT NO. ____ (WRA-1)
WITNESS: ASHBURN
DOCUMENT NO. 1
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3	Class Revenue Before and After Customer Transfers	26
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5	Tariff Sheets	33

TAMPA ELECTRIC COMPANY
DOCKET NO. 080317-EI
CALCULATION OF REVENUE REQUIREMENTS
TOTAL ANNUAL REVENUE REQUIREMENTS

Line No.	MAY 2009 CTs (2 Units)		
	Jurisdictional Approved Total Annual Revenue Requirement	Jurisdictional Revised Total Annual Revenue Requirement	Jurisdictional Difference
1 Net Plant in Service	\$ 94,758,291	\$ 92,068,272	\$ (2,690,019)
2 Rate of Return	8.29%	8.29%	8.29%
3 Required Return (1x2)	\$ 7,855,462	\$ 7,632,460	\$ (223,003)
4 O&M Expense	636,000	636,000	-
5 Depreciation	4,173,000	4,055,020	(117,980)
6 Taxes Other Than Income	2,226,000	2,159,621	(66,379)
7 Income Taxes (4+5+6)x.38575	(2,713,751)	(2,642,635)	(71,116)
8 Income Tax Effect of Interest [(1)x3.12%x-.38575]	(1,140,469)	(1,108,093)	32,375
9 Total NOI Requirement (3+4+5+6+7+8)	11,036,242	10,732,373	(303,870)
10 NOI Multiplier	1.6349	1.6349	1.6349
11 Revenue Requirement (9x10)	\$ 18,043,152	\$ 17,546,357	\$ (496,796)

Line No.	SEPTEMBER 2009 CTs (3 Units)		
	Jurisdictional Approved Total Annual Revenue Requirement	Jurisdictional Revised Total Annual Revenue Requirement	Jurisdictional Difference
12 Net Plant in Service	\$ 137,373,373	\$ 96,110,153	\$ (41,263,220)
13 Rate of Return	8.29%	8.29%	8.29%
14 Required Return (12x13)	\$ 11,388,253	\$ 7,967,532	\$ (3,420,721)
15 O&M Expense	987,000	987,000	-
16 Depreciation	6,051,000	4,142,195	(1,908,805)
17 Taxes Other Than Income	3,348,000	2,212,234	(1,135,766)
18 Income Taxes (15+16+17)x.38575	(4,006,400)	(2,831,956)	(1,174,443)
19 Income Tax Effect of Interest [(12)x3.12%x-.38575]	(1,653,365)	(1,156,739)	496,626
20 Total NOI Requirement (14+15+16+17+18+19)	16,114,488	11,320,265	(4,794,222)
21 NOI Multiplier	1.6349	1.6349	1.6349
22 Revenue Requirement (20x21)	\$ 26,345,577	\$ 18,507,502	\$ (7,838,075)

Line No.	Big Bend Rail		
	Jurisdictional Approved Total Annual Revenue Requirement	Jurisdictional Revised Total Annual Revenue Requirement	Jurisdictional Difference
23 Net Plant in Service	\$ 44,712,909	\$ 44,712,909	-
24 Rate of Return	8.29%	8.29%	8.29%
25 Required Return (23x24)	\$ 3,706,700	\$ 3,706,700	-
26 O&M Expense	-	-	-
27 Depreciation	988,364	988,364	-
28 Taxes Other Than Income	1,133,455	1,133,455	-
29 Income Taxes (26+27+28)x.38575	(818,491)	(818,491)	-
30 Income Tax Effect of Interest [(23)x3.12%x-.38575]	(587,606)	(587,606)	-
31 Total NOI Requirement (25+26+27+28+29+30)	4,422,420	4,422,420	-
32 NOI Multiplier	1.6349	1.6349	1.6349
33 Revenue Requirement (31x32)	\$ 7,230,216	\$ 7,230,216	\$ -

Line No.	Amount	Ratio	Cost Rate	Weighted Cost
34 Common Equity	\$ 1,632,611,907	53.96%	N/A	N/A
35 Long Term Debt	1,384,998,776	45.78%	6.80%	3.11%
36 Short Term Debt	7,904,810	0.26%	2.75%	0.01%
37 Total	\$ 3,025,515,493	100.00%		3.12%

TAMPA ELECTRIC COMPANY
DOCKET NO. 080317-EI
CALCULATION OF REVENUE REQUIREMENTS
CALCULATION OF STEP INCREASE REVENUE REQUIREMENTS

Line
No.

	APPROVED ORDER NO. 09-00571	PSC ADJUSTMENT	APPROVED ORDER NO. 09-00842		
1 Big Bend Rail Facility	\$ 7,138,274	\$ -	\$ 7,138,274		
2 May 2009 CTs	8,030,533	(496,796)	7,533,737		
3 September 2009 CTs	18,908,273	(7,838,075)	11,070,198		
4 Total Step Increase	\$ 34,077,080	\$ (8,334,871)	\$ 25,742,209		

	Big Bend Rail Facility	Bayside 5&6 May CTs (2 Units)	Bayside 3&4/CT 4 September CTs (3 Units)	Staff Adjusted	Approved Step Increase
5 Net Plant in Service	\$ 44,754,000	\$ 36,125,000	\$ 94,563,000	\$ (43,953,239)	\$ 131,488,761
6 Approved Rate of Return	8.29%	8.29%	8.29%	8.29%	8.29%
7 Required Return (5x6)	\$ 3,710,107	\$ 2,994,763	\$ 7,839,273	\$ (3,643,724)	\$ 10,900,418
8 O&M Expense	-	212,000	658,000	-	870,000
9 Depreciation	906,000	1,391,000	4,034,000	(2,026,785)	4,304,215
10 Taxes Other Than Income	1,039,000	2,226,000	3,227,000	(1,202,145)	5,289,855
11 Income Taxes (8+9+10)x.38575	(750,284)	(1,477,037)	(3,054,754)	1,245,559	(4,036,516)
12 Income Tax Effect of Interest [(5)x3.12%x-.38575]	(538,639)	(434,784)	(1,138,118)	529,002	(1,582,539)
13 Total NOI Requirement (7+8+9+10+11+12)	4,366,184	4,911,941	11,565,400	(5,098,092)	15,745,433
14 Approved NOI Multiplier	1.6349	1.6349	1.6349	1.6349	1.6349
15 Revenue Requirement (13x14)	\$ 7,138,274	\$ 8,030,533	\$ 18,908,273	\$ (8,334,871)	\$ 25,742,209

	Amount	Ratio	Cost Rate	Weighted Cost
16 Common Equity	\$ 1,632,611,907	53.96%	N/A	N/A
17 Long Term Debt	1,384,998,776	45.78%	6.80%	3.11%
18 Short Term Debt	7,904,810	0.26%	2.75%	0.01%
19 Total	\$ 3,025,515,493	100.00%		3.12%

TAMPA ELECTRIC COMPANY
TEST PERIOD: PROJECTED CALENDAR YEAR 2009
DEVELOPMENT OF TARGET 2010 STEP INCREASE CLASS SALES REVENUES
IN \$(000)

Line No.	Rate Class	(A) Class Sales Revenue Prior to Rate Case	(B) Incremental Revenue Under Rates Effective May-09	(C) Incremental Revenue Under Rates Effective Aug-09	(D) Class Revenue Based on 2009 Increase (A)+(B)+(C)	(E) Class Revenue Based on 2009 Increase Adjusted for Customer Transfers	(F) Production Capacity Allocation Factor 12 CP & 25% AD	(G) Allocated Revenue Step Increase (F) x \$25,742	(H) Target Step Increase Class Sales Revenues (E) + (G)	(I) Step Increase Revenue Under Proposed Rates	% Increase
1											
2											
3	I. Residential (RS)	454,812					52.488%				
4											
5	II. General Service - Non-Demand (GS)	53,970					6.019%				
6											
7											
8	Total: I + II	508,782	46,901	5,991	561,674	559,126	58.507%	15,061	574,187	574,206	2.7%
9											
10	III. General Service - Demand (GSD)	266,206	27,017	3,260	296,483	299,031	36.117%	9,297	308,329	308,303	3.1%
11											
12											
13	IV. Interruptible General Service (IS)	21,915	21,571	61	43,547	43,547	4.996%	1,286	44,833	44,827	2.9%
14											
15											
16	V. Lighting Service (LS)										
17	A. Energy	4,683	714	77	5,474	5,474	0.380%	98	5,572	5,571	1.8%
18	B. Facilities	36,265	1,022	-	37,287	37,287	0.000%	-	37,287	37,287	0.0%
19	Total: V.	40,948	1,736	77	42,761	42,761	0.380%	98	42,859	42,858	0.2%
20											
21											
22	Total	837,851	97,225 ⁽¹⁾	9,389 ⁽²⁾	944,464	944,465	100.000%	25,742	970,207	970,194	2.7%

Notes:

- This total, \$97,225 K, represents the achieved revenue increase in May-09 under rates approved in Order No. PSC-09-0283-FOF-EI. The approved target increase, per that order, was a \$104,269 K total revenue increase less \$7,117 K in service charge revenue increase less -\$132 K in additional unbilled revenues for a total of \$97,284 K in base rate revenues.
- This total, \$9,389 K, represents the achieved revenue increase in Aug-09 under rates approved in Order No. PSC-09-0571-FOF-EI, which was the difference between the \$97,225 K achieved in May-09 and the \$106,614 K achieved in Aug-09. The approved target increase, per that order, was a \$113,604 K total revenue increase less \$7,117 K in service charge revenue increase less -\$145 K in additional unbilled revenues for a total of \$106,632 K in base rate revenues.
- Differences between RS and GSD totals in Columns D and E reflect net customer transfers between the two classes based on 2009 rate changes.
- The derivation of class revenue under present rates after customer transfers provided on following page.
- The increase of \$25,742 K is derived by subtracting \$8,335 K related to audit findings (i.e., CT installation costs) from the total step increase of \$34,077 K identified in Order No. 09-0283-FOF-EI.

25

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CLASS REVENUE UNDER PRESENT RATES BEFORE AND AFTER CUSTOMER TRANSFERS

Class Revenue Before Transfers ⁽¹⁾		Customer Transfers ⁽²⁾	Class Revenue After Transfers	
RS, RST	\$ 501,285	RS, RSVP-1 Excluding Transfers from RST to RSVP-1	501,238	501,285 RS, RSVP-1
		RST Transfers to RSVP-1	47	
GS, GST	\$ 59,951	GS, GST Excluding Transfers to GSD Standard and GSD Optional	54,143	57,403 GS, GST
		GS Transfers to GSD Standard	3,387	
		GS Transfers to GSD Optional	2,420	
TS	\$ 437	TS	437	437 TS
GSD, GSDT	\$ 203,851	GSD, GSDT Standard Excluding Transfers to GS and GSD Optional	195,391	559,126 RS/GS
		GSD Standard Transfers to GS	2,367	
		GSD Standard Transfers to GSD Optional	6,093	274,432 GSD, GSDT
GSD Optional	\$ 12,358	GSD Optional Excluding Transfers to GS	11,465	
		GSD Optional Transfers to GS	893	20,486 GSD Optional
GSLD, GSLDT	\$ 76,161	GSLD, GSLDT Transfers to GSD Standard	75,653	
		GSLD, GSLDT Transfers to GSD Optional	508	
SBF, SBFT	\$ 4,114	SBF, SBFT	4,114	4,114 SBF, SBFT
IS1, IST1	\$ 27,340	IS-1, IST-1 Transfers to IS, IST	27,340	299,031 GSD/SBF
IS3, IST3	\$ 6,556	IS-3, IST-3 Transfers to IS, IST	6,556	33,895 IS, IST
SBI1	\$ 4,918	SBI-1 Transfers to SBI, SBIT	4,918	9,651 SBI
SBI3	\$ 4,733	SBI-3 Transfers to SBI, SBIT	4,733	43,547 IS/SBI
SL-2 (Energy)	\$ 1,787	SL-2 (Energy Service) Transfers to LS-1	1,787	
OL-1 (Energy)	\$ 1,780	OL-1 (Energy Service) Transfers to LS-1	1,780	5,474 LS-1 (Energy Service) 5,474
OL-3 (Energy)	\$ 1,907	OL-3 (Energy Service) Transfers to LS-1	1,907	
SL-2 (Facilities)	\$ 11,356	SL-2 (Facilities) Transfers to LS-1	11,356	
OL-1 (Facilities)	\$ 9,786	OL-1 (Facilities) Transfers to LS-1	9,786	37,287 LS-1 (Facilities) 37,287
OL-31 (Facilities)	\$ 16,145	OL-3 (Facilities) Transfers to LS-1	16,145	
TOTAL	\$ 944,465		\$ 944,465	TOTAL 944,465

(1) MFR E-13C - Base Revenue at Final Rates Col. 2 - Summary by Old Classification (July 2009)
 (2) MFR E-13C - Base Revenue at Final Rates Col. 2 (July 2009)

TAMPA ELECTRIC COMPANY
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**PROPOSED STEP INCREASE BASE RATES
EFFECTIVE WITH CYCLE 1 BILLS FOR JANUARY 2010**

Schedule/Code	Charge Description	Current Rate	Units	Proposed Rates	Units
RS/RS1/RSVP1					
Customer Charge:					
RS, RSVP	Standard	10.50	\$/Bill	10.50	\$/Bill
Energy Charge:					
RSVP	Standard	4.696	¢/kWh	4.845	¢/kWh
RS	Tier 1	4.346	¢/kWh	4.495	¢/kWh
RS	Tier 2	5.346	¢/kWh	5.495	¢/kWh
GS/GSVP/GST					
Customer Charge:					
GS, GSVP	Standard Metered	10.50	\$/Bill	10.50	\$/Bill
GS	Standard Unmetered	9.00	\$/Bill	9.00	\$/Bill
GST	Time-of-Day	12.00	\$/Bill	12.00	\$/Bill
GST	Time-of-Day (Meter CIAC paid)	10.50	\$/Bill	10.50	\$/Bill
Energy Charge:					
GS, GSVP	Standard	4.696	¢/kWh	4.845	¢/kWh
GST	Time-of-Day On-Peak	12.655	¢/kWh	13.057	¢/kWh
GST	Time-of-Day Off-Peak	1.014	¢/kWh	1.046	¢/kWh
Emergency Relay Charge:					
GS, GSVP	Standard	0.146	¢/kWh	0.151	¢/kWh
GST	Time-of-Day	0.146	¢/kWh	0.151	¢/kWh
TS					
Customer Charge:					
		10.50	\$/Bill	10.50	\$/Bill
Base Energy Charge:					
		4.696	¢/kWh	4.845	¢/kWh
GSD/GSDT					
Customer Charge:					
Rate Code					
360, 365	Standard - Secondary	57.00	\$/Bill	57.00	\$/Bill
360, 365	Standard - Primary	130.00	\$/Bill	130.00	\$/Bill
360, 365	Standard - Subtrans	930.00	\$/Bill	930.00	\$/Bill
362	Time-of-Day - Secondary	57.00	\$/Bill	57.00	\$/Bill
362	Time-of-Day - Primary	130.00	\$/Bill	130.00	\$/Bill
362	Time-of-Day - Subtrans	930.00	\$/Bill	930.00	\$/Bill
362	T-O-D (Meter CIAC) - Secondary	57.00	\$/Bill	57.00	\$/Bill
362	T-O-D (Meter CIAC) - Primary	130.00	\$/Bill	130.00	\$/Bill
362	T-O-D (Meter CIAC) - Subtrans	930.00	\$/Bill	930.00	\$/Bill
364	Optional - Secondary	57.00	\$/Bill	57.00	\$/Bill
364	Optional - Primary	130.00	\$/Bill	130.00	\$/Bill
364	Optional -Subtrans	930.00	\$/Bill	930.00	\$/Bill
Energy Charge:					
360, 365	Standard - Secondary	1.533	¢/kWh	1.583	¢/kWh
360, 365	Standard - Primary	1.533	¢/kWh	1.583	¢/kWh
360, 365	Standard - Subtrans	1.533	¢/kWh	1.583	¢/kWh
362	Time-of-Day Secondary - On-Peak	2.804	¢/kWh	2.898	¢/kWh
362	Time-of-Day Primary - On-Peak	2.804	¢/kWh	2.898	¢/kWh
362	Time-of-Day Subtrans - On-Peak	2.804	¢/kWh	2.898	¢/kWh
362	Time-of-Day Secondary - Off-Peak	1.014	¢/kWh	1.046	¢/kWh
362	Time-of-Day Primary - Off-Peak	1.014	¢/kWh	1.046	¢/kWh
362	Time-of-Day Subtrans - Off Peak	1.014	¢/kWh	1.046	¢/kWh
364	Optional - Secondary	5.635	¢/kWh	5.814	¢/kWh
364	Optional - Primary	5.635	¢/kWh	5.814	¢/kWh
364	Optional -Subtrans	5.635	¢/kWh	5.814	¢/kWh

Schedule/Code	Charge Description	Current Rate	Units	Proposed Rates	Units
Demand Charge:					
360, 365	Standard - Secondary	8.15	\$/kW	8.41	\$/kW
360, 365	Standard - Primary	8.15	\$/kW	8.41	\$/kW
360, 365	Standard - Subtrans	8.15	\$/kW	8.41	\$/kW
362	T-O-D Billing - Secondary	2.75	\$/kW	2.84	\$/kW
362	T-O-D Billing - Primary	2.75	\$/kW	2.84	\$/kW
362	T-O-D Billing - Subtrans	2.75	\$/kW	2.84	\$/kW
362	T-O-D Peak - Secondary	5.40	\$/kW	5.57	\$/kW
362	T-O-D Peak - Primary	5.40	\$/kW	5.57	\$/kW
362	T-O-D Peak - Subtrans	5.40	\$/kW	5.57	\$/kW
364	Optional - Secondary	-	\$/kW	-	\$/kW
364	Optional - Primary	-	\$/kW	-	\$/kW
364	Optional -Subtrans	-	\$/kW	-	\$/kW
Power Factor Charge:					
360, 362, 364	Secondary	0.002	\$/ kVARh	0.002	\$/ kVARh
360, 362, 364	Primary	0.002	\$/ kVARh	0.002	\$/ kVARh
360, 362, 364	Subtransmission	0.002	\$/ kVARh	0.002	\$/ kVARh
Power Factor Credit:					
360, 362, 364	Secondary	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
360, 362, 364	Primary	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
360, 362, 364	Subtransmission	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
Meter Level Discount:					
360, 365	Standard Primary	(1.0)	%	(1.0)	%
360, 365	Standard - Subtrans	(2.0)	%	(2.0)	%
362	Time-of-Day Primary	(1.0)	%	(1.0)	%
362	Time-of-Day - Subtrans	(2.0)	%	(2.0)	%
364	Optional Primary	(1.0)	%	(1.0)	%
364	Optional -Subtrans	(2.0)	%	(2.0)	%
Transformer Ownership Discount:					
360, 365	Standard Primary	(0.71)	\$/kW	(0.73)	\$/kW
360, 365	Standard - Subtrans	(1.12)	\$/kW	(1.16)	\$/kW
362	Time-of-Day Primary	(0.71)	\$/kW	(0.73)	\$/kW
362	Time-of-Day - Subtrans	(1.12)	\$/kW	(1.16)	\$/kW
364	Optional Primary	(0.187)	¢/kWh	(0.193)	¢/kWh
364	Optional -Subtrans	(0.290)	¢/kWh	(0.299)	¢/kWh
Emergency Relay Charge:					
360, 365	Standard Secondary	0.58	\$/kW	0.60	\$/kW
360, 365	Standard Primary	0.58	\$/kW	0.60	\$/kW
360, 365	Standard - Subtrans	0.58	\$/kW	0.60	\$/kW
362	Time-of-Day Secondary	0.58	\$/kW	0.60	\$/kW
362	Time-of-Day Primary	0.58	\$/kW	0.60	\$/kW
362	Time-of-Day - Subtrans	0.58	\$/kW	0.60	\$/kW
364	Optional Secondary	0.146	¢/kWh	0.151	¢/kWh
364	Optional Primary	0.146	¢/kWh	0.151	¢/kWh
364	Optional -Subtrans	0.146	¢/kWh	0.151	¢/kWh
SBF/SBFT					
Customer Charge:					
359	Standard - Secondary	82.00	\$/Bill	82.00	\$/Bill
359	Standard - Primary	155.00	\$/Bill	155.00	\$/Bill
359	Standard - Subtransmission	955.00	\$/Bill	955.00	\$/Bill
358	Time-of-Day Secondary	82.00	\$/Bill	82.00	\$/Bill
358	Time-of-Day Primary	155.00	\$/Bill	155.00	\$/Bill
358	Time-of-Day Subtrans.	955.00	\$/Bill	955.00	\$/Bill
Energy Charge - Supplemental:					
359	Standard - Secondary	1.533	¢/kWh	1.583	¢/kWh

Schedule/Code	Charge Description	Current Rate	Units	Proposed Rates	Units
359	Standard - Primary	1.533	¢/kWh	1.583	¢/kWh
359	Standard - Subtransmission	1.533	¢/kWh	1.583	¢/kWh
358	TOD Secondary - On-Peak	2.804	¢/kWh	2.898	¢/kWh
358	TOD Primary - On-peak	2.804	¢/kWh	2.898	¢/kWh
358	TOD Subtransmission - On-peak	2.804	¢/kWh	2.898	¢/kWh
358	TOD Secondary - Off-Peak	1.014	¢/kWh	1.046	¢/kWh
358	TOD Primary - Off-peak	1.014	¢/kWh	1.046	¢/kWh
358	TOD Subtransmission - Off-peak	1.014	¢/kWh	1.046	¢/kWh
Energy Charge - Standby:					
359, 358	TOD Secondary - On-Peak	1.016	¢/kWh	1.049	¢/kWh
359, 358	TOD Primary - On-peak	1.016	¢/kWh	1.049	¢/kWh
359, 358	TOD Subtransmission - On-peak	1.016	¢/kWh	1.049	¢/kWh
359, 358	TOD Secondary - Off-Peak	1.016	¢/kWh	1.049	¢/kWh
359, 358	TOD Primary - Off-peak	1.016	¢/kWh	1.049	¢/kWh
359, 358	TOD Subtransmission - Off-peak	1.016	¢/kWh	1.049	¢/kWh
Demand Charge - Supplemental:					
359	Standard - Secondary	8.15	\$/kW	8.41	\$/kW
359	Standard - Primary	8.15	\$/kW	8.41	\$/kW
359	Standard - Subtransmission	8.15	\$/kW	8.41	\$/kW
358	Time-of-Day Secondary - Billing	2.75	\$/kW	2.84	\$/kW
358	Time-of-Day Primary - Billing	2.75	\$/kW	2.84	\$/kW
358	Time-of-Day Subtransmission - Billing	2.75	\$/kW	2.84	\$/kW
358	Time-of-Day Secondary - Peak	5.40	\$/kW	5.57	\$/kW
358	Time-of-Day Primary - Peak	5.40	\$/kW	5.57	\$/kW
358	Time-of-Day Subtransmission - Peak	5.40	\$/kW	5.57	\$/kW
Demand Charge - Standby:					
359, 358	TOD Secondary - Facilities Reservation	2.26	\$/kW	2.33	\$/kW
359, 358	TOD Primary - Facilities Reservation	2.26	\$/kW	2.33	\$/kW
359, 358	TOD Subtrans. - Facilities Reservation	2.26	\$/kW	2.33	\$/kW
359, 358	TOD Secondary - Power Supply Reservation	1.22	\$/kW	1.26	\$/kW
359, 358	TOD Primary - Power Supply Reservation	1.22	\$/kW	1.26	\$/kW
359, 358	TOD Subtrans. - Power Supply Reservation	1.22	\$/kW	1.26	\$/kW
359, 358	TOD Secondary - Power Supply Demand	0.48	\$/kW	0.50	\$/kW
359, 358	TOD Primary - Power Supply Demand	0.48	\$/kW	0.50	\$/kW
359, 358	TOD Subtrans. - Power Supply Demand	0.48	\$/kW	0.50	\$/kW
Power Factor Charge Supplemental :					
359, 358	Secondary	0.002	\$/ kVARh	0.002	\$/ kVARh
359, 358	Primary	0.002	\$/ kVARh	0.002	\$/ kVARh
359, 358	Subtransmission	0.002	\$/ kVARh	0.002	\$/ kVARh
Power Factor Charge Standby :					
359, 358	Secondary	0.002	\$/ kVARh	0.002	\$/ kVARh
359, 358	Primary	0.002	\$/ kVARh	0.002	\$/ kVARh
359, 358	Subtransmission	0.002	\$/ kVARh	0.002	\$/ kVARh
Power Factor Credit Supplemental :					
359, 358	Secondary	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
359, 358	Primary	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
359, 358	Subtransmission	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
Power Factor Credit Standby :					
359, 358	Secondary	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
359, 358	Primary	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
359, 358	Subtransmission	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
Meter Level Discount - Supplemental:					
359	Standard - Primary	-1%		-1%	
359	Standard - Subtransmission	-2%		-2%	
358	Time-of-Day Primary	-1%		-1%	
358	Time-of-Day Subtrans.	-2%		-2%	
Meter Level Discount - Standby:					
359, 358	Time-of-Day Primary	-1%		-1%	

Schedule/Code	Charge Description	Current Rate	Units	Proposed Rates	Units
359, 358	Time-of-Day Subtrans.	-2%		-2%	
	Transformer Ownership Discount - Supplemental:				
359	Standard - Primary	(0.71)	\$/kW	(0.73)	\$/kW
359	Standard - Subtransmission	(1.12)	\$/kW	(1.16)	\$/kW
358	Time-of-Day Primary	(0.71)	\$/kW	(0.73)	\$/kW
358	Time-of-Day Subtrans.	(1.12)	\$/kW	(1.16)	\$/kW
	Transformer Ownership Discount - Standby:				
359, 358	Time-of-Day Primary	(0.58)	\$/kW	(0.60)	\$/kW
359, 358	Time-of-Day Subtrans.	(1.13)	\$/kW	(1.17)	\$/kW
	Emergency Power Relay Charge - Supplemental:				
359	Standard - Secondary	0.58	\$/kW	0.60	\$/kW
359	Standard - Primary	0.58	\$/kW	0.60	\$/kW
359	Standard - Subtransmission	0.58	\$/kW	0.60	\$/kW
358	Time-of-Day Secondary	0.58	\$/kW	0.60	\$/kW
358	Time-of-Day Primary	0.58	\$/kW	0.60	\$/kW
358	Time-of-Day Subtrans.	0.58	\$/kW	0.60	\$/kW
	Emergency Power Relay Charge - Standby:				
359, 358	Secondary	0.58	\$/kW	0.60	\$/kW
359, 358	Primary	0.58	\$/kW	0.60	\$/kW
359, 358	Subtrans.	0.58	\$/kW	0.60	\$/kW
IS/ST					
Rate Code	Customer Charge:				
340	Standard - Primary	622.00	\$/Bill	622.00	\$/Bill
340	Standard - Subtrans	2,372.00	\$/Bill	2,372.00	\$/Bill
342	Time-of-Day - Primary	622.00	\$/Bill	622.00	\$/Bill
342	Time-of-Day - Subtrans	2,372.00	\$/Bill	2,372.00	\$/Bill
	Energy Charge:				
340	Standard - Primary	2.504	¢/kWh	2.577	¢/kWh
340	Standard - Subtrans	2.504	¢/kWh	2.577	¢/kWh
342	Time-of-Day Primary - On-Peak	2.504	¢/kWh	2.577	¢/kWh
342	Time-of-Day Subtrans - On-Peak	2.504	¢/kWh	2.577	¢/kWh
342	Time-of-Day Primary - Off-Peak	2.504	¢/kWh	2.577	¢/kWh
342	Time-of-Day Subtrans - Off Peak	2.504	¢/kWh	2.577	¢/kWh
	Demand Charge:				
340	Standard - Primary	1.45	\$/kW	1.49	\$/kW
340	Standard - Subtrans	1.45	\$/kW	1.49	\$/kW
342	T-O-D Billing - Primary	1.45	\$/kW	1.49	\$/kW
342	T-O-D Billing - Subtrans	1.45	\$/kW	1.49	\$/kW
342	T-O-D Peak - Primary	-	\$/kW	-	\$/kW
342	T-O-D Peak - Subtrans	-	\$/kW	-	\$/kW
	Power Factor Charge:				
340	Standard - Primary	0.002	\$/ kVARh	0.002	\$/ kVARh
340	Standard - Subtransmission	0.002	\$/ kVARh	0.002	\$/ kVARh
342	T-O-D Billing - Primary	0.002	\$/ kVARh	0.002	\$/ kVARh
342	T-O-D Billing - Subtrans	0.002	\$/ kVARh	0.002	\$/ kVARh
	Power Factor Credit:				
340	Standard - Primary	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
340	Standard - Subtransmission	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
342	T-O-D Billing - Primary	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
342	T-O-D Billing - Subtrans	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
	Meter Level Discount:				
340	Standard - Subtrans	(1.0)	%	(1.0)	%
342	Time-of-Day - Subtrans	(1.0)	%	(1.0)	%
	Transformer Ownership Discount:				

Schedule/Code	Charge Description	Current Rate	Units	Proposed Rates	Units
340	Standard - Subtrans	(0.40)	\$/kW	(0.41)	\$/kW
342	Time-of-Day - Subtrans	(0.40)	\$/kW	(0.41)	\$/kW
	Emergency Relay Charge:				
340	Standard Primary	0.57	\$/kW	0.59	\$/kW
340	Standard - Subtrans	0.57	\$/kW	0.59	\$/kW
342	Time-of-Day Primary	0.57	\$/kW	0.59	\$/kW
342	Time-of-Day - Subtrans	0.57	\$/kW	0.59	\$/kW
SBI					
	Customer Charge:				
349	Standard - Primary	647.00	\$/Bill	647.00	\$/Bill
349	Standard - Subtransmission	2,397.00	\$/Bill	2,397.00	\$/Bill
348	Time-of-Day Primary	647.00	\$/Bill	647.00	\$/Bill
348	Time-of-Day Subtrans.	2,397.00	\$/Bill	2,397.00	\$/Bill
	Energy Charge - Supplemental:				
349	Standard - Primary	2.504	¢/kWh	2.577	¢/kWh
349	Standard - Subtransmission	2.504	¢/kWh	2.577	¢/kWh
348	TOD Primary - On-peak	2.504	¢/kWh	2.577	¢/kWh
348	TOD Subtransmission - On-peak	2.504	¢/kWh	2.577	¢/kWh
348	TOD Primary - Off-peak	2.504	¢/kWh	2.577	¢/kWh
348	TOD Subtransmission - Off-peak	2.504	¢/kWh	2.577	¢/kWh
	Energy Charge - Standby:				
348 , 349	Primary - On-peak	1.006	¢/kWh	1.035	¢/kWh
348 , 349	Subtransmission - On-peak	1.006	¢/kWh	1.035	¢/kWh
348 , 349	Primary - Off-peak	1.006	¢/kWh	1.035	¢/kWh
348 , 349	Subtransmission - Off-peak	1.006	¢/kWh	1.035	¢/kWh
	Demand Charge - Supplemental:				
349	Standard - Primary	1.45	\$/kW	1.49	\$/kW
349	Standard - Subtransmission	1.45	\$/kW	1.49	\$/kW
348	Time-of-Day Primary - Billing	1.45	\$/kW	1.49	\$/kW
348	Time-of-Day Subtransmission - Billing	1.45	\$/kW	1.49	\$/kW
348	Time-of-Day Primary - Peak	-	\$/kW	-	\$/kW
348	Time-of-Day Subtransmission - Peak	-	\$/kW	-	\$/kW
	Demand Charge - Standby:				
348 , 349	Primary - Facilities Reservation	1.45	\$/kW	1.49	\$/kW
348 , 349	Subtrans. - Facilities Reservation	1.45	\$/kW	1.49	\$/kW
348 , 349	Primary - Power Supply Reservation	1.20	\$/kW	1.25	\$/kW
348 , 349	Subtrans. - Power Supply Reservation	1.20	\$/kW	1.25	\$/kW
348 , 349	Primary - Power Supply Demand	0.48	\$/kW	0.50	\$/kW
348 , 349	Subtrans. - Power Supply Demand	0.48	\$/kW	0.50	\$/kW
	Power Factor Charge Supplemental :				
348 , 349	Primary	0.002	\$/ kVARh	0.002	\$/ kVARh
348 , 349	Subtransmission	0.002	\$/ kVARh	0.002	\$/ kVARh
	Power Factor Charge Standby :				
348 , 349	Primary	0.002	\$/ kVARh	0.002	\$/ kVARh
348 , 349	Subtransmission	0.002	\$/ kVARh	0.002	\$/ kVARh
	Power Factor Credit Supplemental :				
348 , 349	Primary	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
348 , 349	Subtransmission	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
	Power Factor Credit Standby :				
348 , 349	Primary	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
348 , 349	Subtransmission	(0.001)	\$/ kVARh	(0.001)	\$/ kVARh
	Meter Level Discount - Supplemental:				
348 , 349	Subtransmission	(1.0)	%	(1.0)	%
	Meter Level Discount - Standby:				
348 , 349	Subtransmission	(1.0)	%	(1.0)	%

Schedule/Code	Charge Description	Current Rate	Units	Proposed Rates	Units
	Transformer Ownership Discount - Supplemental:				
348 , 349	Subtransmission	(0.40)	\$/kW	(0.41)	\$/kW
	Transformer Ownership Discount - Standby:				
348 , 349	Subtransmission	(0.33)	\$/kW	(0.34)	\$/kW
	Emergency Power Relay Charge - Supplemental:				
348 , 349	Primary	0.57	\$/kW	0.59	\$/kW
348 , 349	Subtransmission	0.57	\$/kW	0.59	\$/kW
	Emergency Power Relay Charge - Standby:				
348 , 349	Primary	0.57	\$/kW	0.59	\$/kW
348 , 349	Subtransmission	0.57	\$/kW	0.59	\$/kW
LS1					
	Customer Charge (Metered Street Lights)	10.50	\$/Bill	10.50	\$/Bill
	Energy Charge	2.419	¢/kWh	2.462	¢/kWh



SEVENTEENTH REVISED SHEET NO. 6.030
CANCELS SIXTEENTH REVISED SHEET NO. 6.030

RESIDENTIAL SERVICE

SCHEDULE: RS

RATE CODE: 110, 111, 120, 121, 130, 131, 170, 171, 180, 181.

AVAILABLE: Entire service area.

APPLICABLE: To residential consumers in individually metered private residences, apartment units, and duplex units. All energy must be for domestic purposes and should not be shared with or sold to others. In addition, energy used in commonly-owned facilities in condominium and cooperative apartment buildings will qualify for this rate schedule, subject to the following criteria:

1. 100% of the energy is used exclusively for the co-owners' benefit.
2. None of the energy is used in any endeavor which sells or rents a commodity or provides service for a fee.
3. Each point of delivery will be separately metered and billed.
4. A responsible legal entity is established as the customer to whom the Company can render its bills for said service.

Resale not permitted.

LIMITATION OF SERVICE: This schedule includes service to single phase motors rated up to 7.5 HP. Three phase service may be provided where available for motors rated 7.5 HP and over.

MONTHLY RATE:

Customer Facilities Charge:
\$10.50

Energy and Demand Charge:

First 1,000 kWh	4.495¢ per kWh
All additional kWh	5.495¢ per kWh

MINIMUM CHARGE: The Customer Facilities Charge.

FUEL CHARGE: See Sheet Nos. 6.020 and 6.021.

Continued to Sheet No. 6.031

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



TAMPA ELECTRIC

NINETEENTH REVISED SHEET NO. 6.050
CANCELS EIGHTEENTH REVISED SHEET NO. 6.050

GENERAL SERVICE - NON DEMAND

SCHEDULE: GS

RATE CODE: 200, 201, 920.

AVAILABLE: Entire service area.

APPLICABLE: For lighting and power in establishments not classified as residential whose energy consumption has not exceeded 9,000 kWh in any one of the prior twelve (12) consecutive billing periods ending with the current billing period. For any billing period that exceeds 35 days, the energy consumption shall be prorated to that of a 30-day amount for purposes of administering this requirement. Resale not permitted.

CHARACTER OF SERVICE: Single or 3 phase, 60 cycles and approximately 120 volts or higher, at Company's option.

LIMITATION OF SERVICE: All service under this rate shall be furnished through one meter. Standby service permitted on Schedule GST only.

MONTHLY RATE:

Customer Facilities Charge:

Metered accounts	\$10.50
Un-metered accounts	\$ 9.00

Energy and Demand Charge:

4.845¢ per kWh

MINIMUM CHARGE: The Customer Facilities Charge.

EMERGENCY RELAY POWER SUPPLY CHARGE: The monthly charge for emergency relay power supply service shall be 0.151¢ per kWh of billing energy. This charge is in addition to the compensation the customer must make to the Company as a contribution-in-aid of construction.

Continued to Sheet No. 6.051

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



**EIGHTEENTH REVISED SHEET NO. 6.080
CANCELS SEVENTEENTH REVISED SHEET NO. 6.080**

GENERAL SERVICE - DEMAND

SCHEDULE: GSD

RATE CODE: 360, 364, 365.

AVAILABLE: Entire service area.

APPLICABLE: To any customer whose energy consumption has exceeded 9,000 kWh in any one of the prior twelve (12) consecutive billing periods ending with the current billing period. Also available to customers with energy consumption at any level below 9,000 kWh per billing period who agree to remain on this rate for at least twelve (12) months. For any billing period that exceeds 35 days, the energy consumption shall be prorated to that of a 30-day amount for purposes of administering this requirement. Resale not permitted.

CHARACTER OF SERVICE: A-C; 60 cycles; 3 phase; at any standard Company voltage.

LIMITATION OF SERVICE: Standby service is permitted only for customers who generate less than 20% of their on-site load requirements or whose generating equipment is used for emergency purposes.

MONTHLY RATE:

STANDARD

OPTIONAL

Customer Facilities Charge:

Secondary Metering Voltage \$ 57.00
Primary Metering Voltage \$130.00
Subtransmission Metering Voltage \$930.00

Customer Facilities Charge:

Secondary Metering Voltage \$ 57.00
Primary Metering Voltage \$130.00
Subtransmission Metering Voltage \$930.00

Demand Charge:

\$8.41 per kW of billing demand

Demand Charge:

\$0.00 per kW of billing demand

Energy Charge:

1.583¢ per kWh

Energy Charge:

5.814¢ per kWh

The customer may select either standard or optional. Once an option is selected, the customer must remain on that option for twelve (12) consecutive months.

Continued to Sheet No. 6.081

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



**SIXTEENTH REVISED SHEET NO. 6.081
CANCELS FIFTEENTH REVISED SHEET NO. 6.081**

Continued from Sheet No. 6.080

BILLING DEMAND: The highest measured 30-minute interval kW demand during the billing period.

MINIMUM CHARGE: The Customer Facilities Charge and any Minimum Charge associated with optional riders.

TEMPORARY DISCONTINUANCE OF SERVICE: Where the use of energy is seasonal or intermittent, no adjustments will be made for a temporary discontinuance of service. Any customer prior to resuming service within 12 months after such service was discontinued will be required to pay all charges which would have been billed if service had not been discontinued.

POWER FACTOR

Power factor will be calculated for customers with measured demands of 1,000 kW or more in any one billing period out of twelve (12) consecutive billing periods ending with the current billing period. When the average power factor during the month is less than 85%, the monthly bill will be increased \$0.002 for each kVARh by which the reactive energy numerically exceeds 0.619744 times the billing energy. When the average power factor during the month is greater than 90%, the monthly bill will be decreased \$0.001 for each kVARh by which the reactive energy is numerically less than 0.484322 times the billing energy.

METERING LEVEL DISCOUNT: When the customer takes energy metered at primary voltage, a discount of 1% will apply to the Demand Charge, Energy Charge, Transformer Ownership Discount, Power Factor billing, Emergency Relay Power Supply Charge, and any credits from optional riders.

When the customer takes energy metered at subtransmission or higher voltage, a discount of 2% will apply to the Demand Charge, Energy Charge, Transformer Ownership Discount, Power Factor billing, Emergency Relay Power Supply Charge, and any credits from optional riders.

TRANSFORMER OWNERSHIP DISCOUNT: When a customer under the standard rate takes service at primary voltage, a discount of 73¢ per kW of billing demand will apply. A discount of \$1.16 per kW of billing demand will apply when a customer under the standard rate takes service at subtransmission or higher voltage.

Continued to Sheet No. 6.082

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



**THIRD REVISED SHEET NO. 6.082
CANCELS SECOND REVISED SHEET NO. 6.082**

Continued from Sheet No. 6.081

When a customer under the optional rate takes service at primary voltage, a discount of 0.193¢ per kWh will apply. A discount of 0.299¢ per kWh will apply when a customer under the optional rate takes service at subtransmission or higher voltage.

EMERGENCY RELAY POWER SUPPLY CHARGE: The monthly charge for emergency relay power supply service shall be 60¢ per kW of billing demand for customers taking service under the standard rate and 0.151¢/kWh for customer taking service under the optional rate. This charge is in addition to the compensation the customer must make to the Company as a contribution-in-aid of construction.

FUEL CHARGE: See Sheet Nos. 6.020 and 6.021.

ENERGY CONSERVATION CHARGE: See Sheet Nos. 6.020 and 6.021.

CAPACITY CHARGE: See Sheet Nos. 6.020 and 6.021.

ENVIRONMENTAL COST RECOVERY CHARGE: See Sheet Nos. 6.020 and 6.021.

FLORIDA GROSS RECEIPTS TAX: See Sheet No. 6.021.

FRANCHISE FEE CHARGE: See Sheet No. 6.021.

PAYMENT OF BILLS: See Sheet No. 6.022.

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



SEVENTEENTH REVISED SHEET NO. 6.085
CANCELS SIXTEENTH REVISED SHEET NO. 6.085

**INTERRUPTIBLE SERVICE
(CLOSED TO NEW BUSINESS AS OF MAY 7, 2009)**

SCHEDULE: IS

RATE CODE: 340

AVAILABLE: Entire Service Area.

APPLICABLE: To be eligible for service under Rate Schedule IS, a customer must have been taking interruptible service under rate schedules IS-1, IST-1, IS-3, IST-3, SBI-1, or SBI-3 on May 6, 2009 and have signed the Agreement for the Purchase of Industrial Load Management Service under Rate Schedule GSLM-2. When electric service is desired at more than one location, each such location or point of delivery shall be considered as a separate customer. Resale not permitted.

CHARACTER OF SERVICE: The electric energy supplied under this schedule is three phase primary voltage or higher.

LIMITATION OF SERVICE: Standby service is permitted only for customers who generate less than 20% of their on-site load requirements or whose generating equipment is used for emergency purposes.

MONTHLY RATE:

Customer Facilities Charge:

Primary Metering Voltage	\$622.00
Subtransmission Metering Voltage	\$2,372.00

Demand Charge:

\$1.49 per KW of billing demand

Energy Charge:

2.577¢ per KWH

Continued to Sheet No. 6.086

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



FIFTEENTH REVISED SHEET NO. 6.086
CANCELS FOURTEENTH REVISED SHEET NO. 6.086

Continued from Sheet No. 6.085

BILLING DEMAND: The highest measured 30-minute interval KW demand during the month.

MINIMUM CHARGE: The Customer Facilities Charge and any Minimum Charge associated with optional riders.

POWER FACTOR: When the average power factor during the month is less than 85%, the monthly bill will be increased \$0.002 for each kVARh by which the reactive energy numerically exceeds 0.619744 times the billing energy. When the average power factor during the month is greater than 90%, the monthly bill will be decreased \$0.001 for each kVARh by which the reactive energy is numerically less than 0.484322 times the billing energy.

METERING LEVEL DISCOUNT: When the customer takes energy metered at subtransmission or higher voltage, a discount of 1% of the energy and demand charge will apply to the Demand Charge, Energy Charge, Transformer Ownership Discount, Power Factor billing, Emergency Relay Power Supply Charge, and any credit associated with optional riders.

TRANSFORMER OWNERSHIP DISCOUNT: When the customer furnishes and installs all subtransmission or higher voltage to utilization voltage substation transformation, a discount of 41¢ per KW of billing demand will apply.

EMERGENCY RELAY POWER SUPPLY CHARGE: The monthly charge for emergency relay power supply service shall be 59¢ per KW of billing demand. This charge is in addition to the compensation the customer must make to the Company as a contribution-in-aid of construction.

VOLTAGE ADJUSTMENT FOR CONTRACT CREDIT VALUE

The Contract Credit Value (CCV) under Rate Rider GLSM-2 will be reduced by 1% to reflect service at primary voltage, the lowest voltage service provided under this schedule. Additionally, a Metering Level Discount may apply under this schedule.

Continued to Sheet No. 6.087

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



TAMPA ELECTRIC

**TWENTY-THIRD REVISED SHEET NO. 6.290
CANCELS TWENTY-SECOND REVISED SHEET NO. 6.290**

TEMPORARY SERVICE

SCHEDULE: TS

RATE CODE: 050.

AVAILABLE: Entire service area.

APPLICABLE: Single phase temporary service.

LIMITATION OF SERVICE: Service is limited to a maximum of 70 amperes at 240 volts. Larger services and three phase service entrances must be served under the appropriate rate schedule, plus the cost of installing and removing the temporary facilities is required.

MONTHLY RATE:

Customer Facilities Charge:

\$10.50

Energy and Demand Charge:

4.845¢ per kWh.

MINIMUM CHARGE: The Customer Facilities Charge

FUEL CHARGE: See Sheet Nos. 6.020 and 6.021.

ENERGY CONSERVATION CHARGE: See Sheet Nos. 6.020 and 6.021.

CAPACITY CHARGE: See Sheet Nos. 6.020 and 6.021.

ENVIRONMENTAL COST RECOVERY CHARGE: See Sheet Nos. 6.020 and 6.021.

FLORIDA GROSS RECEIPTS TAX: Sheet No. 6.021.

FRANCHISE FEE CHARGE: See Sheet No. 6.021.

MISCELLANEOUS: A Temporary Service Charge of \$235.00 shall be paid upon application for the recovery of costs associated with providing, installing, and removing the company's temporary service facilities. Where the Company is required to provide additional facilities other than a service drop or connection point to the Company's existing distribution system, the customer shall also pay, in advance, for the estimated cost of providing, installing and removing such additional facilities, excluding the cost of any portion of these facilities which will remain as a part of the permanent service.

PAYMENT OF BILLS: See Sheet No. 6.022.

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



TAMPA ELECTRIC

**EIGHTEENTH REVISED SHEET NO. 6.320
CANCELS SEVENTEENTH REVISED SHEET NO. 6.320**

**TIME-OF-DAY
GENERAL SERVICE - NON DEMAND
(OPTIONAL)**

SCHEDULE: GST

RATE CODE: 202.

AVAILABLE: Entire service area.

APPLICABLE: For lighting and power in establishments not classified as residential whose energy consumption has not exceeded 9,000 kWh in any one of the prior twelve (12) consecutive billing periods ending with the current billing period. All of the electric load requirements on the customer's premises must be metered at one (1) point of delivery. For any billing period that exceeds 35 days, the energy consumption shall be prorated to that of a 30-day amount for purposes of administering this requirement. Resale not permitted.

CHARACTER OF SERVICE: Single or 3 phase, 60 cycles and approximately 120 volts or higher, at Company's option.

LIMITATION OF SERVICE: All service under this rate shall be furnished through one meter. Standby service permitted.

MONTHLY RATE:

Customer Facilities Charge:

\$12.00

Energy and Demand Charge:

13.057¢ per kWh during peak hours

1.046¢ per kWh during off-peak hours

Continued to Sheet No. 6.321

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



TAMPA ELECTRIC

**SIXTEENTH REVISED SHEET NO. 6.321
CANCELS FIFTEENTH REVISED SHEET NO. 6.321**

Continued from Sheet No. 6.320

DEFINITIONS OF THE USE PERIODS: All time periods stated in clock time. (Meters are programmed to automatically adjust for changes from standard to daylight saving time and vice-versa.)

	<u>April 1 - October 31</u>	<u>November 1 - March 31</u>
<u>Peak Hours:</u> (Monday-Friday)	12:00 Noon - 9:00 PM	6:00 AM - 10:00 AM and 6:00 PM - 10:00 PM

Off-Peak Hours: All other weekday hours, and all hours on Saturdays, Sundays, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day shall be off-peak.

MINIMUM CHARGE: The Customer Facilities Charge.

CUSTOMER FACILITIES CHARGE CREDIT: Any customer who makes a one time contribution in aid of construction of \$70.00 (lump-sum meter payment), shall receive a credit of \$1.50 per month. This contribution in aid of construction will be subject to a partial refund if the customer terminates service on this optional time-of-day rate.

TERMS OF SERVICE: A customer electing this optional rate shall have the right to transfer to the standard applicable rate at any time without additional charge for such transaction, except that any customer who requests this optional rate for the second time on the same premises will be required to sign a contract to remain on this rate for at least one (1) year.

EMERGENCY RELAY POWER SUPPLY CHARGE: The monthly charge for emergency relay power supply service shall be 0.151¢ per kWh of billing energy. This charge is in addition to the compensation the customer must make to the Company as a contribution-in-aid of construction.

FUEL CHARGE: See Sheet Nos. 6.020 and 6.021.

ENERGY CONSERVATION CHARGE: See Sheet Nos. 6.020 and 6.021.

Continued to Sheet No. 6.322

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



TAMPA ELECTRIC

NINETEENTH REVISED SHEET NO. 6.330
CANCELS EIGHTEENTH REVISED SHEET NO. 6.330

**TIME-OF-DAY
GENERAL SERVICE - DEMAND
(OPTIONAL)**

SCHEDULE: GSDT

RATE CODE: 362.

AVAILABLE: Entire service area.

APPLICABLE: To any customer whose energy consumption has exceeded 9,000 kWh in any one of the prior twelve (12) consecutive billing periods ending with the current billing period. Also available to customers with energy consumption at any level below 9,000 kWh per billing period who agree to remain on this rate for at least twelve (12) months. For any billing period that exceeds 35 days, the consumption shall be prorated to that of a 30-day amount for purposes of administering this requirement. Resale not permitted.

CHARACTER OF SERVICE: A-C; 60 cycles; 3 phase; at any standard Company voltage.

LIMITATION OF SERVICE: Standby service is permitted only for customers who generate less than 20% of their on-site load requirements or whose generating equipment is used for emergency purposes.

MONTHLY RATE:

Customer Facilities Charge:

Secondary Metering Voltage	\$ 57.00
Primary Metering Voltage	\$130.00
Subtransmission Metering Voltage	\$930.00

Demand Charge:

\$2.84 per kW of billing demand, plus
\$5.57 per kW of peak billing demand

Energy Charge:

2.898¢ per kWh during peak hours
1.046¢ per kWh during off-peak hours

Continued to Sheet No. 6.331

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



FIFTEENTH REVISED SHEET NO. 6.332
CANCELS FOURTEENTH REVISED SHEET NO. 6.332

Continued from Sheet No. 6.331

POWER FACTOR

Power factor will be calculated for customers with measured demands of 1,000 kW in any billing period out of twelve (12) consecutive billing periods ending with the current billing period. When the average power factor during the month is less than 85%, the monthly bill will be increased \$0.002 for each kVARh by which the reactive energy numerically exceeds 0.619744 times the billing energy. When the average power factor during the month is greater than 90%, the monthly bill will be decreased \$0.001 for each kVARh by which the reactive energy is numerically less than 0.484322 times the billing energy.

METERING LEVEL DISCOUNT: When the customer takes energy metered at primary voltage, a discount of 1% will apply to the Demand Charge, Energy Charge, Transformer Ownership Discount, Power Factor billing, Emergency Relay Power Supply Charge, and any credits from optional riders.

When the customer takes energy metered at subtransmission or higher voltage, a discount of 2% will apply to the Demand Charge, Energy Charge, Transformer Ownership Discount, Power Factor billing, Emergency Relay Power Supply Charge, and any credits from optional riders.

TRANSFORMER OWNERSHIP DISCOUNT: When the customer takes service at primary voltage a discount of 73¢ per kW of billing demand will apply. When the customer takes service at subtransmission or higher voltage, a discount of \$1.16 per kW of billing demand will apply.

EMERGENCY RELAY POWER SUPPLY CHARGE: The monthly charge for emergency relay power supply service shall be 60¢ per kW of billing demand. This charge is in addition to the compensation the customer must make to the Company as a contribution-in-aid of construction.

FUEL CHARGE: See Sheet Nos. 6.020 and 6.021.

ENERGY CONSERVATION CHARGE: See Sheet Nos. 6.020 and 6.021.

CAPACITY CHARGE: See Sheet Nos. 6.020 and 6.021.

ENVIRONMENTAL COST RECOVERY CHARGE: See Sheet Nos. 6.020 and 6.021.

FLORIDA GROSS RECEIPTS TAX: See Sheet No. 6.021.

FRANCHISE FEE CHARGE: See Sheet No. 6.021.

PAYMENT OF BILLS: See Sheet No. 6.022.

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



**SEVENTEENTH REVISED SHEET NO. 6.340
CANCELS SIXTEENTH REVISED SHEET NO. 6.340**

**TIME OF DAY
INTERRUPTIBLE SERVICE
(CLOSED TO NEW BUSINESS AS OF MAY 7, 2009)**

SCHEDULE: IST

RATE CODE: 342.

AVAILABLE: Entire Service Area.

APPLICABLE: To be eligible for service under Rate Schedule IST, a customer must have been taking interruptible service under rate schedules IS-1, IST-1, IS-3, IST-3, SBI-1, or SBI-3 on May 6, 2009 and have signed the Agreement for the Purchase of Industrial Load Management Service under Rate Schedule GSLM-2. When electric service is desired at more than one location, each such location or point of delivery shall be considered as a separate customer. Resale not permitted.

CHARACTER OF SERVICE: The electric energy supplied under this schedule is three phase primary voltage or higher.

LIMITATION OF SERVICE: Standby service is permitted only for customers who generate less than 20% of their on-site load requirements or whose generating equipment is used for emergency purposes.

Customer Facilities Charge:

Primary Metering Voltage	\$622.00
Subtransmission Metering Voltage	\$2,372.00

Demand Charge:

\$1.49 per KW of billing demand

Energy Charge:

2.577¢ per KWH

Continued to Sheet No. 6.345

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



**TWENTY-FIRST REVISED SHEET NO. 6.350
CANCELS TWENTIETH REVISED SHEET NO. 6.350**

Continued from Sheet No. 6.345

METERING LEVEL DISCOUNT: When the customer takes energy metered at subtransmission or higher voltage, a discount of 1% of the energy and demand charge will apply to the Demand Charge, Energy Charge, Transformer Ownership Discount, Power Factor billing, Emergency Relay Power Supply Charge, and any credit associated with optional riders.

TRANSFORMER OWNERSHIP DISCOUNT: When the customer furnishes and installs all subtransmission or higher voltage to utilization voltage substation transformation, a discount of 41¢ per KW of billing demand will apply.

EMERGENCY RELAY POWER SUPPLY CHARGE: The monthly charge for emergency relay power supply service shall be 59¢ per KW of billing demand. This charge is in addition to the compensation the customer must make to the Company as a contribution-in-aid of construction.

VOLTAGE ADJUSTMENT FOR CONTRACT CREDIT VALUE
The Contract Credit Value (CCV) under Rate Rider GLSM-2 will be reduced by 1% to reflect service at primary voltage, the lowest voltage service provided under this schedule. Additionally, a Metering Level Discount may apply under this schedule.

FUEL CHARGE: See Sheet Nos. 6.020 and 6.021.

ENERGY CONSERVATION CHARGE: See Sheet Nos. 6.020 and 6.021.

CAPACITY CHARGE: See Sheet Nos. 6.020 and 6.021.

ENVIRONMENTAL COST RECOVERY CHARGE: See Sheet Nos. 6.020 and 6.021.

FLORIDA GROSS RECEIPTS TAX: See Sheet No. 6.021.

FRANCHISE FEE CHARGE: See Sheet No. 6.021.

PAYMENT OF BILLS: See Sheet No. 6.025.

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



**FOURTH REVISED SHEET NO. 6.565
CANCELS THIRD REVISED SHEET NO. 6.565**

Continued from Sheet No. 6.560

MONTHLY RATES:

Customer Facilities Charge: \$10.50
Energy and Demand Charges: 4.845¢ per kWh (for all pricing periods)

MINIMUM CHARGE: The Customer Facilities Charge.

FUEL CHARGE: See Sheet Nos. 6.020 and 6.021.

ENERGY CONSERVATION CHARGE: See Sheet Nos. 6.020 and 6.021.

CAPACITY CHARGE: See Sheet Nos. 6.020 and 6.021.

ENVIRONMENTAL COST RECOVERY CHARGE: See Sheet Nos. 6.020 and 6.021.

FLORIDA GROSS RECEIPTS TAX: See Sheet No. 6.021.

FRANCHISE FEE CHARGE: See Sheet No. 6.021.

PAYMENT OF BILLS: See Sheet No. 6.022.

DETERMINATION OF PRICING PERIODS: Pricing periods are established by season for weekdays and weekends. The pricing periods for price levels P₁ (Low Cost Hours), P₂ (Moderate Cost Hours) and P₃ (High Cost Hours) are as follows:

<u>May through October</u>	<u>P₁</u>	<u>P₂</u>	<u>P₃</u>
Weekdays	11 P.M. to 6 A.M.	6 A.M. to 1 P.M. 6 P.M. to 11 P.M.	1 P.M. to 6 P.M.
Weekends	11 P.M. to 6 A.M.	6 A.M. to 11 P.M.	-----
<u>November through April</u>	<u>P₁</u>	<u>P₂</u>	<u>P₃</u>
Weekdays	11 P.M. to 5 A.M.	5 A.M. to 6 A.M. 10 A.M. to 11 P.M.	6 A.M. to 10 A.M.
Weekends	11 P.M. to 6 A.M.	6 A.M. to 11 P.M.	-----

The pricing periods for price level P₄ (Critical Cost Hours) shall be determined at the sole discretion of the Company. Level P₄ hours shall not exceed 134 hours per year.

Continued to Sheet No. 6.570

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:
JAN 01 2010



**SECOND REVISED SHEET NO. 6.585
CANCELS FIRST REVISED SHEET NO. 6.585**

Continued from Sheet No. 6.580

MONTHLY RATES:

Customer Facilities Charge: \$10.50
Energy and Demand Charges: 4.845¢ per KWH (for all pricing periods)

MINIMUM CHARGE: The customer facilities charge.

FUEL CHARGE: See Sheet Nos. 6.020 and 6.021.

ENERGY CONSERVATION CHARGE: See Sheet Nos. 6.020 and 6.021.

CAPACITY CHARGE: See Sheet Nos. 6.020 and 6.021.

ENVIRONMENTAL COST RECOVERY CHARGE: See Sheet Nos. 6.020 and 6.021.

FLORIDA GROSS RECEIPTS TAX: See Sheet No. 6.021.

FRANCHISE FEE CHARGE: See Sheet No. 6.021.

PAYMENT OF BILLS: See Sheet No. 6.022.

DETERMINATION OF PRICING PERIODS: Pricing periods are established by season for weekdays and weekends. The pricing periods for price levels P₁ (Low Cost Hours), P₂ (Moderate Cost Hours) and P₃ (High Cost Hours) are as follows:

<u>May through October</u>	<u>P₁</u>	<u>P₂</u>	<u>P₃</u>
Weekdays	11 P.M. to 6 A.M.	6 A.M. to 1 P.M. 6 P.M. to 11 P.M.	1 P.M. to 6 P.M.
Weekends	11 P.M. to 6 A.M.	6 A.M. to 11 P.M.	-----
<u>November through April</u>	<u>P₁</u>	<u>P₂</u>	<u>P₃</u>
Weekdays	11 P.M. to 5 A.M.	5 A.M. to 6 A.M. 10 A.M. to 11 P.M.	6 A.M. to 10 A.M.
Weekends	11 P.M. to 6 A.M.	6 A.M. to 11 P.M.	-----

The pricing periods for price level P₄ (Critical Cost Hours) shall be determined at the sole discretion of the Company. Level P₄ hours shall not exceed 134 hours per year.

Continued to Sheet No. 6.590

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



TAMPA ELECTRIC

SECOND REVISED SHEET NO. 6.590
CANCELS FIRST REVISED SHEET NO. 6.590

Continued from Sheet No. 6.585

The pricing period for the following observed holidays will be the same as the weekend hour price levels for the month in which the holiday occurs: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

EMERGENCY RELAY POWER SUPPLY CHARGE: The monthly charge for emergency relay power supply service shall be 0.151¢ per KWH of billing energy. This charge is in addition to the compensation the customer must make to the Company as contribution-in-aid of construction.

TERM OF SERVICE: The initial term of service under this rate shall be for a period of one year to be continued thereafter unless terminated by the customer with thirty days written notice.

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



NINTH REVISED SHEET NO. 6.600
CANCELS EIGHTH REVISED SHEET NO. 6.600

FIRM STANDBY AND SUPPLEMENTAL SERVICE

SCHEDULE: SBF

RATE CODE: 359

AVAILABLE: Entire service area.

APPLICABLE: Required for all self-generating Customers whose generating capacity in kilowatts (exclusive of emergency generation equipment) exceeds 20% of their site load in kilowatts and who take firm service from the utility. Also available to self-generating Customers whose generating capacity in kilowatts does not exceed 20% of their site load in kilowatts, but who agree to all the terms and conditions of this rate schedule. Resale not permitted.

CHARACTER OF SERVICE: A-C; 60 cycles; 3 phase; at any standard company voltage.

LIMITATION OF SERVICE: A customer taking service under this tariff must sign a Tariff Agreement for the Purchase of Firm Standby and Supplemental Service. (See Sheet No. 7.600)

MONTHLY RATE:

Customer Facilities Charge:

Secondary Metering Voltage	\$ 82.00
Primary Metering Voltage	\$155.00
Subtransmission Metering Voltage	\$955.00

CHARGES FOR STANDBY SERVICE:

Demand Charge:

\$ 2.33 per kW-Month of Standby Demand
(Local Facilities Reservation Charge)

plus the greater of:

\$ 1.26 per kW-Month of Standby Demand
(Power Supply Reservation Charge) or
\$ 0.50 per kW-Day of Actual Standby Billing Demand
(Power Supply Demand Charge)

Energy Charge:

1.049¢ per Standby kWh

Continued to Sheet No. 6.601

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



NINTH REVISED SHEET NO. 6.601
CANCELS EIGHTH REVISED SHEET NO. 6.601

Continued from Sheet No. 6.600

CHARGES FOR SUPPLEMENTAL SERVICE:

Demand Charge:

\$8.41 per kW-Month of Supplemental Billing Demand (Supplemental Billing Demand Charge)

Energy Charge:

1.583¢ per Supplemental kWh

DEFINITIONS OF THE USE PERIODS: All time periods stated in clock time. (Meters are programmed to automatically adjust for changes from standard to daylight saving time and vice-versa.)

	<u>April 1 - October 31</u>	<u>November 1 - March 31</u>
<u>Peak Hours:</u> (Monday-Friday)	12:00 Noon - 9:00 PM	6:00 AM - 10:00 AM and 6:00 PM - 10:00 PM

Off-Peak Hours: All other weekday hours, and all hours on Saturdays, Sundays, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day shall be off-peak.

BILLING UNITS:

Demand Units: Metered Demand - The highest measured 30-minute interval kW demand served by the company during the month.

Site Load - The highest kW total of Customer generation plus deliveries by the company less deliveries to the Company, occurring in the same 30-minute interval, during the month.

Normal Generation - The generation level equaled or exceeded by the Customer's generation 10% of the metered intervals during the previous twelve months.

Supplemental Billing Demand - The amount, if any, by which the highest Site Load during any 30-minute interval in the month exceeds Normal Generation, but no greater than Metered Demand.

Continued to Sheet No. 6.602

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



**TENTH REVISED SHEET NO. 6.603
CANCELS NINTH REVISED SHEET NO. 6.603**

Continued from Sheet No. 6.602

METERING LEVEL DISCOUNT: When the customer takes energy metered at primary voltage, a discount of 1% will apply to the Demand Charge, Energy Charge, Transformer Ownership Discount, Power Factor billing, Emergency Relay Power Supply Charge, and any credits from optional riders.

When the customer takes energy metered at subtransmission or higher voltage, a discount of 2% will apply to the Demand Charge, Energy Charge, Transformer Ownership Discount, Power Factor billing, Emergency Relay Power Supply Charge, and any credits from optional riders.

TRANSFORMER OWNERSHIP DISCOUNT: When the customer takes service at primary voltage, a discount of 73¢ per kW of Supplemental Demand and 60¢ per kW of Standby Demand will apply.

When the customer takes service at subtransmission or higher voltage, a discount of \$1.16 per kW of Supplemental Demand and \$1.17 per kW of Standby Demand will apply.

EMERGENCY RELAY POWER SUPPLY CHARGE: The monthly charge for emergency relay power supply service shall be 60¢ per kW of Supplemental Demand and Standby Demand. This charge is in addition to the compensation the customer must make to the Company as a contribution-in-aid of construction.

FUEL CHARGE: See Sheet Nos. 6.020 and 6.021. Note: Standby fuel charges shall be based on the time of use (i.e., peak and off-peak) fuel rates for Rate Schedule SBF. Supplemental fuel charges shall be based on the standard fuel rate for Rate Schedule SBF.

ENERGY CONSERVATION CHARGE: See Sheet Nos. 6.020 and 6.021.

CAPACITY CHARGE: See Sheet Nos. 6.020 and 6.021.

ENVIRONMENTAL COST RECOVERY CHARGE: See Sheet Nos. 6.020 and 6.021.

FLORIDA GROSS RECEIPTS TAX: See Sheet No. 6.021.

FRANCHISE FEE CHARGE: See Sheet No. 6.021.

PAYMENT OF BILLS: See Sheet No. 6.022.

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



SIXTH REVISED SHEET NO. 6.605
CANCELS FIFTH REVISED SHEET NO. 6.605

**TIME-OF-DAY
FIRM STANDBY AND SUPPLEMENTAL SERVICE
(OPTIONAL)**

SCHEDULE: SBFT

RATE CODE: 358

AVAILABLE: Entire service area.

APPLICABLE: Required for all self-generating Customers whose generating capacity in kilowatts (exclusive of emergency generation equipment) exceeds 20% of their site load in kilowatts and who take firm service from the utility. Also available to self-generating Customers whose generating capacity in kilowatts does not exceed 20% of their site load in kilowatts, but who agree to all the terms and conditions of this rate schedule. Resale not permitted.

CHARACTER OF SERVICE: A-C; 60 cycles; 3 phase; at any standard company voltage.

LIMITATION OF SERVICE: A Customer taking service under this tariff must sign a Tariff Agreement for the Purchase of Firm Standby and Supplemental Service. (See Sheet No. 7.600)

MONTHLY RATE:

Customer Facilities Charge:

Secondary Metering Voltage	\$ 82.00
Primary Metering Voltage	\$155.00
Subtransmission Metering Voltage	\$955.00

CHARGES FOR STANDBY SERVICE:

Demand Charge:

\$ 2.33 per kW-Month of Standby Demand
(Local Facilities Reservation Charge)

plus the greater of:

\$ 1.26 per kW-Month of Standby Demand
(Power Supply Reservation Charge) or

\$ 0.50 per kW-Day of Actual Standby Billing Demand
(Power Supply Demand Charge)

Energy Charge:

1.049¢ per Standby kWh

Continued to Sheet No. 6.606

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



SIXTH REVISED SHEET NO. 6.606
CANCELS FIFTH REVISED SHEET NO. 6.606

Continued from Sheet No. 6.605

CHARGES FOR SUPPLEMENTAL SERVICE

Demand Charge:

\$2.84 per kW-Month of Supplemental Demand (Supplemental Billing Demand Charge), plus
\$5.57 per kW-Month of Supplemental Peak Demand (Supplemental Peak Billing Demand Charge)

Energy Charge:

2.898¢ per Supplemental kWh during peak hours
1.046¢ per Supplemental kWh during off-peak hours

DEFINITIONS OF THE USE PERIODS: All time periods stated in clock time. (Meters are programmed to automatically adjust for changes from standard to daylight saving time and vice-versa.)

	<u>April 1 - October 31</u>	<u>November 1 - March 31</u>
<u>Peak Hours:</u> (Monday-Friday)	12:00 Noon - 9:00 PM	6:00 AM - 10:00 AM and 6:00 PM - 10:00 PM

Off-Peak Hours: All other weekday hours, and all hours on Saturdays, Sundays, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day shall be off-peak.

BILLING UNITS:

Demand Units: Metered Demand - The highest measured 30-minute interval kW demand served by the Company during the month.

Metered Peak Demand - The highest measured 30-minute interval kW demand served by the Company during the peak hours.

Site Load - The highest kW total of Customer generation plus deliveries by the company less deliveries to the company, occurring in the same 30-minute interval, during the month.

Continued to Sheet No. 6.607

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



**SEVENTH REVISED SHEET NO. 6.608
CANCELS SIXTH REVISED SHEET NO. 6.608**

Continued from Sheet No. 6.607

TERM OF SERVICE: Any customer receiving service under this schedule will be required to give the Company written notice at least 60 months prior to transferring to a firm non-standby schedule. Such notice shall be irrevocable unless the Company and the customer should mutually agree to void the notice.

TEMPORARY DISCONTINUANCE OF SERVICE: Where the use of energy is seasonal or intermittent, no adjustments will be made for a temporary discontinuance of service. Any customer prior to resuming service within 12 months after such service was discontinued will be required to pay all charges which would have been billed if service had not been discontinued.

POWER FACTOR: When the average power factor during the month is less than 85%, the monthly bill will be increased \$0.002 for each kVARh by which the reactive energy numerically exceeds 0.619744 times the billing energy. When the average power factor during the month is greater than 90%, the monthly bill will be decreased \$0.001 for each kVARh by which the reactive energy is numerically less than 0.484322 times the billing energy.

METERING LEVEL DISCOUNT: When the customer takes energy metered at primary voltage, a discount of 1% will apply to the Demand Charges, Energy Charges, Transformer Ownership Discounts, Power Factor billing, Emergency Relay Power Supply Charge, and any credits from optional riders.

When the customer takes energy metered at subtransmission or higher voltage, a discount of 2% will apply to the Demand Charges, Energy Charges, Transformer Ownership Discounts, Power Factor billing, Emergency Relay Power Supply Charge, and any credits from optional riders.

TRANSFORMER OWNERSHIP DISCOUNT: When the customer takes service at primary voltage, a discount of 73¢ per kW of Supplemental Demand and 60¢ per kW of Standby Demand will apply.

When the customer takes service at subtransmission or higher voltage, a discount of \$1.16 per kW of Supplemental Demand and \$1.17 per kW of Standby Demand will apply.

EMERGENCY RELAY POWER SUPPLY CHARGE: The monthly charge for emergency relay power supply service shall be 60¢ per kW of Supplemental Demand and Standby Demand. This charge is in addition to the compensation the customer must make to the Company as a contribution-in-aid of construction.

Continued to Sheet No. 6.609

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



FOURTH REVISED SHEET NO. 6.700
CANCELS THIRD REVISED SHEET NO. 6.700

**INTERRUPTIBLE STANDBY AND SUPPLEMENTAL SERVICE
(CLOSED TO NEW BUSINESS AS OF MAY 7, 2009)**

SCHEDULE: SBI

RATE CODES: 348, 349

AVAILABLE: Entire service area.

APPLICABLE: Required for all self-generating customers eligible for service under rate schedules IS or IST whose generating capacity in kilowatts (exclusive of emergency generation equipment) exceeds 20% of their site load in kilowatts. Also available to self-generating customers eligible for service under rate schedules IS or IST whose generating capacity in kilowatts does not exceed 20% of their site load in kilowatts, but who agree to all the terms and conditions of this rate schedule. To be eligible for service under this rate schedule, a customer must have been taking interruptible service under rate schedules IS-1, IST-1, IS-3, IST-3, SBI-1, or SBI-3 on May 6, 2009 and have signed the Supplemental Tariff Agreement for the Purchase of Industrial Standby and Supplemental Load Management Rider Service. Resale not permitted.

CHARACTER OF SERVICE: The electric energy supplied under this schedule is three phase primary voltage or higher

LIMITATION OF SERVICE: A customer taking service under this tariff must sign the Tariff Agreement for the Purchase of Standby and Supplemental Service

MONTHLY RATE:

Customer Facilities Charge:

Primary Metering Voltage	\$647.00
Subtransmission Metering Voltage	\$2,397.00

Demand Charge:

\$1.49 per KW-Month of Supplemental Demand (Supplemental Demand Charge)
\$1.49 per KW-Month of Standby Demand (Local Facilities Reservation Charge)

plus the greater of:

\$1.25 per KW-Month of Standby Demand (Bulk Transmission Reservation Charge); or

\$0.50 per KW-Day of Actual Standby Billing Demand (Bulk Transmission Demand Charge)

Continued to Sheet No. 6.705

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:
JAN 01 2010



**SECOND REVISED SHEET NO. 6.705
CANCELS FIRST REVISED SHEET NO. 6.705**

Continued from Sheet No. 6.700

Energy Charge:

2.577¢ per Supplemental KWH

1.035¢ per Standby KWH

DEFINITIONS OF THE USE PERIODS: All time periods stated in clock time. (Meters are programmed to automatically adjust for changes from standard to daylight saving time and vice-versa.)

	<u>April 1 - October 31</u>	<u>November 1 - March 31</u>
<u>Peak Hours:</u> (Monday-Friday)	12:00 Noon - 9:00 PM	6:00 AM - 10:00 AM and 6:00 PM - 10:00 PM

Off-Peak Hours: All other weekday hours, and all hours on Saturdays, Sundays, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day shall be off-peak.

BILLING UNITS:

Demand Units: Metered Demand - The highest measured 30-minute interval KW demand served by the company during the month.

Site Load - The highest KW total of Customer generation plus deliveries by the Company less deliveries to the company, occurring in the same 30-minute interval, during the month.

Normal Generation - The generation level equaled or exceeded by the customer's generation 10% of the metered intervals during the previous twelve months.

Supplemental Demand - The amount, if any, by which the highest Site Load during any 30-minute interval in the month exceeds Normal Generation, but no greater than Metered Demand.

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ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:

JAN 01 2010



**SECOND REVISED SHEET NO. 6.715
CANCELS FIRST REVISED SHEET NO. 6.715**

Continued from Sheet No. 6.710

POWER FACTOR: When the average power factor during the month is less than 85%, the monthly bill will be increased \$0.002 for each kVARh by which the reactive energy numerically exceeds 0.619744 times the billing energy. When the average power factor during the month is greater than 90%, the monthly bill will be decreased \$0.001 for each kVARh by which the reactive energy is numerically less than 0.484322 times the billing energy.

METERING LEVEL DISCOUNT: When the customer takes energy metered at subtransmission or higher voltage, a discount of 1% will apply to the standby and supplemental demand charges, energy charges, Transformer Ownership Discounts, Power Factor billing, Emergency Relay Power Supply Charges, and any credits associated with optional riders.

TRANSFORMER OWNERSHIP DISCOUNT: When the customer furnishes and installs all subtransmission or higher voltage to utilization voltage substation transformation, a discount of 41¢ per KW of Supplemental Demand and 34¢ per KW of Standby Demand will apply.

EMERGENCY RELAY POWER SUPPLY CHARGE: The monthly charge for emergency relay power supply service shall be 59¢ per KW of Supplemental Demand and Standby Demand. This charge is in addition to the compensation the customer must make to the Company as a contribution-in-aid of construction.

VOLTAGE ADJUSTMENT FOR CONTRACT CREDIT VALUE

The Contract Credit Value (CCV) under Rate Rider GLSM-3 will be reduced by 1% to reflect service at primary voltage, the lowest voltage service provided under this schedule. Additionally, a Metering Level Discount may apply under this schedule.

FUEL CHARGE: Supplemental energy may be billed at either standard or time-of-day fuel rates at the option of the customer. See Sheet Nos. 6.020 and 6.021.

ENERGY CONSERVATION CHARGE: See Sheet Nos. 6.020 and 6.021.

CAPACITY CHARGE: See Sheet Nos. 6.020 and 6.021.

ENVIRONMENTAL COST RECOVERY CHARGE: See Sheet Nos. 6.020 and 6.021.

FLORIDA GROSS RECEIPTS TAX: See Sheet No. 6.021.

FRANCHISE FEE CHARGE: See Sheet No. 6.021.

PAYMENT OF BILLS: See Sheet No. 6.022.

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DATE EFFECTIVE:

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**SECOND REVISED SHEET NO. 6.805
CANCELS FIRST REVISED SHEET NO. 6.805**

Continued from Sheet No. 6.800

MONTHLY RATE:

Fixture and Fixture Maintenance Charges:

Rate Code		Description	Lamp Size				Charges per Unit (\$)			
Dusk to Dawn	Timed Svc.		Initial Lumens ⁽³⁾	Lamp Wattage ⁽⁴⁾	kWh		Fixture	Maint.	Non-Fuel Energy	
					Dusk to Dawn	Timed Svc.			Dusk to Dawn	Timed Svc.
High Pressure Sodium										
800	860	Cobra ⁽¹⁾	4,000	50	20	10	2.85	2.24	0.49	0.25
802	862	Cobra/Nema ⁽¹⁾	6,300	70	29	14	2.89	1.90	0.71	0.34
803	863	Cobra/Nema ⁽²⁾	9,500	100	44	22	3.28	2.10	1.08	0.54
804	864	Cobra	16,000	150	66	33	3.77	1.82	1.62	0.81
805	865	Cobra	28,500	250	105	52	4.40	2.35	2.59	1.28
806	866	Cobra	50,000	400	163	81	4.59	2.70	4.01	1.99
468	454	Flood ⁽¹⁾	28,500	250	105	52	4.85	2.35	2.59	1.28
478	484	Flood	50,000	400	163	81	5.15	2.71	4.01	1.99
809	869	Mongoose	50,000	400	163	81	5.87	2.73	4.01	1.99
509	508	Post Top (PT) ⁽¹⁾	4,000	50	20	10	3.59	2.24	0.49	0.25
570	530	Classic PT	9,500	100	44	22	10.70	1.71	1.08	0.54
810	870	Coach PT ⁽¹⁾	6,300	70	29	14	4.25	1.90	0.71	0.34
572	532	Colonial PT	9,500	100	44	22	10.61	1.71	1.08	0.54
571	531	Contemporary PT ⁽¹⁾	9,500	100	44	22	7.48	1.93	1.08	0.54
573	533	Salem PT	9,500	100	44	22	8.15	1.71	1.08	0.54
550	534	Shoebox	9,500	100	44	22	7.23	1.71	1.08	0.54
566	536	Shoebox	28,500	250	105	52	7.84	2.87	2.59	1.28
552	538	Shoebox	50,000	400	163	81	8.59	2.20	4.01	1.99
Metal Halide										
520	522	Cobra ⁽¹⁾	32,000	400	159	79	5.44	3.62	3.91	1.94
556	541	Flood ⁽¹⁾	32,000	400	159	79	7.55	3.63	3.91	1.94
558	578	Flood	107,800	1,000	383	191	9.48	7.37	9.43	4.70
574	548	General PT ⁽¹⁾	14,400	175	74	37	9.83	3.37	1.82	0.91
575	568	Salem PT ⁽¹⁾	14,400	175	74	37	8.47	3.38	1.82	0.91
564	549	Shoebox ⁽¹⁾	12,800	175	74	37	7.18	3.34	1.82	0.91
554	540	Shoebox ⁽¹⁾	32,000	400	159	79	9.04	3.58	3.91	1.94
576	577	Shoebox	107,800	1,000	383	191	14.89	7.37	9.43	4.70

⁽¹⁾ Closed to new business
⁽²⁾ Nema fixture is closed to new business. 100 Watt Cobra fixture is still available.
⁽³⁾ Lumen output may vary by lamp configuration and age.
⁽⁴⁾ Wattage ratings do not include ballast losses.

Continued to Sheet No. 6.810

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DATE EFFECTIVE:

JAN 01 2010



**SECOND REVISED SHEET NO. 6.815
CANCELS FIRST REVISED SHEET NO. 6.815**

Continued from Sheet No. 6.810

Miscellaneous Facilities Charges:

Rate Code	Description	Monthly Facility Charge	Monthly Maintenance Charge
563	Timer	\$6.81	\$1.29
569	PT Bracket (accommodates two post top fixtures)	\$3.85	\$0.05

NON-STANDARD FACILITIES AND SERVICES:

The customer shall pay all costs associated with additional company facilities and services that are not considered standard for providing lighting service, including but not limited to, the following:

1. relays;
2. distribution transformers installed solely for lighting service;
3. protective shields;
4. bird deterrent devices;
5. light trespass shields;
6. light rotations;
7. light pole relocations;
8. devices required by local regulations to control the levels or duration of illumination including associated planning and engineering costs;
9. removal and replacement of pavement required to install underground lighting cable; and
10. directional boring.

MINIMUM CHARGE: The monthly charge.

FUEL CHARGE: See Sheet Nos. 6.020 and 6.021.

ENERGY CONSERVATION CHARGE: See Sheet Nos. 6.020 and 6.021.

CAPACITY CHARGE: See Sheet Nos. 6.020 and 6.021

ENVIRONMENTAL COST RECOVERY CHARGE: See Sheet Nos. 6.020 and 6.021

FLORIDA GROSS RECEIPTS TAX: See Sheet No. 6.021

FRANCHISE FEE: See Sheet No. 6.021

PAYMENT OF BILLS: See Sheet No. 6.022

SPECIAL CONDITIONS:

On customer-owned public street and highway lighting systems not subject to other rate schedules, the monthly rate for energy served at primary or secondary voltage, at the company's option, shall be 2.462¢ per kWh of metered usage, plus a customer charge of \$10.50 per month and the applicable additional charges as specified on Sheet Nos. 6.020 and 6.021.

Continued to Sheet No. 6.820

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JAN 0 1 2010