

**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 080317-EI**

**IN RE: TAMPA ELECTRIC COMPANY'S
PETITION FOR AN INCREASE IN BASE RATES
AND MISCELLANEOUS SERVICE CHARGES**



**REBUTTAL TESTIMONY AND EXHIBIT
OF
MARK J. HORNICK**

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BEFORE THE PUBLIC SERVICE COMMISSION

REBUTTAL TESTIMONY

OF

MARK J. HORNICK

1
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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") as Director, Engineering and Construction.

13
14 Q. Are you the same Mark J. Hornick who filed direct
15 testimony in this proceeding?

16
17 A. Yes I am.

18
19 Q. What is the purpose of your rebuttal testimony?

20
21 A. The purpose of my rebuttal testimony is to address errors
22 and shortcomings in the prepared direct testimony of Mr.
23 Helmuth W. Schultz III and Mr. Hugh Larkin, Jr. CPA,
24 testifying on behalf of the Citizens of the State of
25 Florida, and Mr. Jeffry Pollock, testifying on behalf of

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1 the Florida Industrial Power Users' Group ("FIPUG"). Mr.
2 Larkin reaches incorrect conclusions about the company's
3 dredging expense, combustion turbines, and rail
4 facilities. Messrs. Schultz and Pollock reach incorrect
5 conclusions about the company's scheduled outages and
6 overall generation maintenance plans and associated
7 expenses.

8
9 **Q.** Have you prepared an exhibit supporting your rebuttal
10 testimony?

11
12 **A.** Yes I have. My Rebuttal Exhibit No.____ (MJH-2) consists
13 of one document, "Total Planned Outages - All Plants",
14 which was prepared by me or under my direction and
15 supervision.

16
17 **BIG BEND CHANNEL DREDGING**

18 **Q.** Is the dredging of the Big Bend shipping channel in 2009
19 necessary and appropriate?

20
21 **A.** Yes. The delivery of solid fuel to Big Bend Station is
22 currently performed using waterborne vessels. The
23 shipping channels near the station accumulate sediment
24 over time, which eventually impedes the vessels' ability
25 to navigate when fully loaded. Tampa Electric's

1 experience has shown that dredging needs to occur about
2 every five years. The dock area and channels were
3 dredged in 1992, 1997 and again in 2002. Without
4 dredging in 2009, vessels will need to be "light loaded"
5 to reduce their required draft to navigate the channel.
6 The light loading of vessels will result in
7 transportation inefficiencies and increased fuel costs in
8 the form of financial penalties for waterborne fuel
9 transportation. Furthermore, Tampa Electric has a
10 contractual obligation with United Maritime Group to
11 maintain the Big Bend channels to accommodate vessels to
12 a draft of 33 feet.

13
14 Dredging of the inlet canal is also needed in 2009 due to
15 silt and sediment accumulation at the circulating water
16 pump inlets. This accumulation reduces unit efficiency,
17 thereby increasing fuel costs, and causes additional
18 maintenance expense.

19
20 Q. On page 30 of his direct testimony, Mr. Larkin argues
21 that the company's estimated dredging costs for 2009 are
22 too high compared with past years' expenses. What is the
23 basis for the company's cost estimate for dredging in
24 2009?

25

1 **A.** The company's estimate is based on a realistic view of
2 the dredging projects needed in 2009. The company's cost
3 estimate for dredging is \$6.9 million, which consists of
4 \$5.5 million for the shipping channel dredging, \$1
5 million for the inlet canal dredging, \$200,000 for the
6 terminal dock area dredging and \$200,000 for required
7 aids to navigation maintenance.

8
9 There are several reasons for the higher costs than in
10 prior years. In previous years' dredging projects, the
11 spoil material removed from the channel was conveyed to
12 disposal areas adjacent to the Big Bend Station. This
13 has been efficient and low in cost. With each successive
14 dredge, the available storage at adjacent disposal areas
15 has been depleted. The disposal areas are currently
16 about 80 percent full and there is not enough capacity to
17 store the volume of dredge material that will be removed
18 in 2009. The additional cost of expanding an existing
19 disposal area or paying for off-site spoil disposal was
20 included in the 2009 budgeted amount. Also, the estimate
21 from the dredging contractor to perform the work has
22 increased significantly since 2002. All of these factors
23 are reflected in the \$6.9 million estimate for the
24 dredging project.

25

1 Q. How did Tampa Electric estimate the 2009 cost for
2 dredging?

3
4 A. The company estimated the quantity of material to be
5 dredged in the shipping and inlet channels based upon
6 preliminary hydrographic surveys and past dredging
7 experience and then obtained estimates for this work from
8 a local dredge/marine contractor. The company compiled
9 estimates for other costs that accompany dredging
10 including dike integrity testing, surveys, and other
11 costs based upon the company's last dredging project.
12 Because the adjacent disposal areas cannot handle
13 additional dredge material, an additional cost was added
14 to the estimate either to increase the dikes on one of
15 the local disposal areas or to account for offsite
16 disposal. Finally, since there are currently two users
17 of the channel, many of the costs are expected to be
18 shared between Tampa Electric and the Mosaic Company.
19 Only the company's portion of dredging costs is reflected
20 in the 2009 projections.

21
22 Q. How do you respond to Mr. Larkin's argument that
23 according to the company's five year dredging cycle,
24 dredging should have occurred in 2007 and therefore, it
25 is not needed in 2009?

1 **A.** While the company's experience has been that the Big Bend
2 channels need to be dredged every five years, it is not a
3 hard and fast rule. In 2007 as the company evaluated the
4 need to dredge, it made the determination that since it
5 was not incurring "light loading" penalties from its
6 waterborne carrier, it could wait for a year or two
7 before incurring dredging expense. The last dredging was
8 completed in late 2002 and the company expects to begin
9 work in early 2009 so the interval will be just over six
10 years. Certainly Mr. Larkin would not suggest that Tampa
11 Electric should have gone ahead and incurred almost \$7
12 million of dredging expense in 2007, just because five
13 years had lapsed since the last dredging project. To
14 suggest that because the company deferred dredging beyond
15 2007 so there is not a need to dredge in 2009 is
16 illogical. As with most decisions that the company must
17 make, Tampa Electric manages its overall business needs
18 and available resources to ensure it is providing the
19 best service at reasonable rates. This decision to delay
20 dredging until 2009 was no different.

21
22 Dredging the Big Bend channels in 2009 is necessary and
23 the company has reasonably estimated its share of
24 dredging expense at \$6.9 million. After this project is
25 completed, the company will continue to monitor the

1 condition of the channel. It will most likely not need
2 to be dredged for another five years.

3
4 **ANNUALIZATION OF COMBUSTION TURBINES**

5 **Q.** In Mr. Larkin's direct testimony regarding the addition
6 of the combustion turbines ("CTs") in May and September
7 of 2009, he concludes that "if, in fact, these combustion
8 turbines are necessary and used and useful, the Company
9 must be projecting additional sales so that the
10 utilization of the combustion turbines is a necessary
11 addition to the Company's generation." Please comment on
12 his conclusion.

13
14 **A.** The CT peaking unit additions in 2009 are primarily
15 needed to ensure the reliability and operating efficiency
16 of the system, not to increase the sales of electricity.
17 These peaking units, as the description suggests, will
18 serve the demand of customers at peak periods of time.
19 They will replace the existing CTs at Big Bend Station
20 and provide additional peaking capacity. The energy
21 sales from these machines will be relatively small and
22 have been included in the test year projections for
23 energy production.

24
25 **Q.** What other benefits will the five CTs provide?

1 **A.** As described in my direct testimony, in addition to
2 meeting peak demand, the 2009 CTs will provide black
3 start and quick start capability. The quick start
4 capability (capability to go from off line to full load
5 in 10 minutes) meets the operating reserve requirement
6 criteria with machines that are off line but ready to
7 start at a moments notice. Without this capability, the
8 generating units that are in service would need to be
9 operated at less than maximum capacity to insure that
10 they can increase output to meet the reserve requirement.
11 This is known as "spinning reserve".
12

13 **Q.** Please address Mr. Larkin's assertion on page 18 that
14 "there are cost savings which the Company did not reflect
15 in the annualization of these units."
16

17 **A.** He is incorrect and it appears he misunderstood my
18 statement that "these machines offer a more economic
19 option for meeting the company's operating reserve
20 requirements than by spinning reserve, which requires
21 keeping large units running." The benefits come to
22 customers primarily by way of fuel savings, which are not
23 the subject of this proceeding. These fuel savings are
24 made possible by enabling the company to operate its
25 generating units in a more efficient manner. There are

1 no significant O&M savings to capture in 2009 projections
2 as Mr. Larkin suggests.

3
4 **ANNUALIZATION OF BIG BEND STATION RAIL FACILITIES**

5 **Q.** Mr. Larkin's direct testimony regarding the Big Bend
6 Station rail facilities concludes, "Reduced fuel costs
7 will stimulate additional sales and thus, provide a
8 return on the Company's investment." Do you agree with
9 his conclusion?

10
11 **A.** No I do not. The Big Bend Station rail facilities are
12 needed to cost effectively and reliably transport solid
13 fuel by rail as described in Tampa Electric witness Joann
14 Wehle's rebuttal testimony. The reduction in fuel costs
15 would have very little, if any, impact on the sales of
16 energy. The facilities are not being constructed to
17 enhance electric sales; they are being constructed to
18 help ensure the lowest delivered cost for coal and
19 petroleum coke.

20
21 **Q.** Will the rail facilities include a train loading
22 structure, a more costly option, as Mr. Larkin describes
23 in his direct testimony?

24
25 **A.** No. The rail facilities are being designed and built to

1 only unload solid fuel from rail cars. An option to add
2 train loading equipment was depicted on one of the
3 general arrangement drawings; however, this option is not
4 being pursued and there are no costs for rail loading
5 included in the company's 2009 estimated costs for this
6 project.

7
8 **GENERATING UNIT OUTAGES AND MAINTENANCE EXPENSES**

9 **Q.** Are there other shortcomings in Mr. Pollock's analysis
10 related to generation outages and maintenance expenses?
11

12 **A.** Yes. His testimony and analysis contains several factual
13 errors. He simply averages scheduled outage expenses for
14 2003 through 2009 and concludes this amount represents
15 future maintenance expenses. The calculation is flawed
16 in many respects and it in no way reflects the company's
17 expected costs for generation maintenance.
18

19 **Q.** Please describe in more detail Mr. Pollock's errors.
20

21 **A.** Mr. Pollock's analysis contains three errors. First, he
22 ignores my direct testimony where I describe several
23 significant factors that have contributed to increased
24 production O&M expenses including 1) the cost of
25 materials and supplies have increased dramatically in

1 recent years, 2) qualified construction labor has been
2 expensive and difficult to secure, and 3) the increased
3 costs associated with operating environmental control
4 equipment on the generating units along with other
5 environmental requirements. Mr. Pollock's analysis does
6 not adjust historical expenses for known escalations.

7
8 Second, his simple averaging approach focuses only on
9 planned outage expense and ignores forced outage and
10 routine (non-outage) maintenance expense. To only focus
11 on one aspect of overall generation maintenance expense
12 is not appropriate.

13
14 Third, his analysis concludes that the total number of
15 planned outage weeks in the test year is not
16 representative of a normal year based on historical
17 comparisons. While the 2009 planned outage weeks are
18 slightly higher than other years, they are reasonable
19 given Tampa Electric's existing and future generating
20 fleet maintenance needs.

21
22 **Q.** The first flaw you identified is easily understandable.
23 Please explain Mr. Pollock's second flaw in more detail.

24
25 **A.** Not only does Mr. Pollock calculate his proposed outage

1 expense using a simple arithmetic average of planned
2 outage expenses from 2003 through 2009 while completely
3 ignoring escalation, he also fails to recognize the
4 relationship between planned outage expense, forced
5 outage expense and routine (non-outage) maintenance
6 expense. During years with lower than average planned
7 outages, there will generally be higher levels of forced
8 outage and non-outage maintenance expense simply because
9 the units are operating more and there are more
10 opportunities for in-service failures and routine non-
11 outage needs. Conversely, forced outage or non-outage
12 expenses are not incurred when a unit is out of service
13 during a planned outage. It is not appropriate to single
14 out and reduce one category of maintenance expense
15 without evaluating overall maintenance impacts.

16
17 **Q.** Please describe Mr. Pollock's third flaw in his analysis
18 and recommended disallowance.

19
20 **A.** Mr. Pollock's testimony contains several factual errors.
21 On page 8, lines 16 and 17, Mr. Pollock states, "Overall
22 plant outages would increase from 43 weeks in 2008 to 54
23 weeks in 2009." The total planned outage weeks budgeted
24 for 2008 are 48.5 weeks, not 43 weeks. He repeats this
25 error on page 9, line 14 and in his exhibit JP-1 on page

1 2 of 2. This error leads to an incorrect conclusion that
2 the planned outage weeks in 2009 are much higher than in
3 2008.

4
5 On page of 8, lines 21 and 22 of Mr. Pollock's testimony,
6 he incorrectly states, "The last time two major Big Bend
7 outages occurred in the same years was in 2006 when Units
8 1 and 3 were both down for major inspection outages." In
9 fact, there were two major Big Bend outages in 2007 when
10 Big Bend Unit 4 had a major outage which included the
11 tie-in work on the selective catalytic reduction ("SCR")
12 equipment in the spring and Big Bend Unit 3 began its
13 major outage in the fall with 6.15 weeks in 2007 and then
14 into 2008.

15
16 Finally, in his exhibit JP-1 on page 2 of 2, Mr. Pollock
17 shows the total planned outage weeks in 2004 as 28.9.
18 The number of total planned outage weeks was actually
19 29.1 as provided in the company's response to FIPUG's
20 First Set of Interrogatories No. 1.

21
22 Q. But isn't it true that the recent outages at Big Bend
23 Station have been due to SCR installations and should not
24 be considered normal and recurring types of outages?

25

1 **A.** It is true that since 2007 Tampa Electric has been and
2 will continue installing SCRs on all four Big Bend units.
3 This work will be complete in April 2010. However, while
4 these units have been out of service for environmental
5 equipment installation purposes, other routine
6 maintenance has also been performed to optimize overall
7 outage time on the company's most cost effective units.
8 While SCR installations will not occur after 2010, other
9 routine maintenance will continue annually.

10
11 **Q.** Mr. Pollock concludes that production O&M expense in the
12 test year is overstated because it reflects an abnormal
13 number of scheduled outages. Are the number of scheduled
14 outages in the test year reasonable compared to the
15 number of expected scheduled outages in future years?

16
17 **A.** Yes they are. The overall generation scheduled outages
18 for the years 2008 through 2011 are shown in detail on
19 Document No. 1 of my rebuttal exhibit. It shows that the
20 number of outage weeks per year will range from 45 to 54
21 weeks and will average 48.4 weeks. It is true that the
22 planned outage duration for 2009 is greater than that for
23 2008, 2010 and 2011 but it is not unreasonable.

24
25 While Mr. Pollock focuses specifically on Big Bend

1 Station, the company's projected generation outages are
2 driven not only by planned outages at Big Bend Station
3 but also by planned outages at Bayside and Polk Power
4 stations. Bayside Station Units 1 and 2 are scheduled
5 for major planned outages in 2011 and 2012. At Polk
6 Power Station, Polk Unit 1 is scheduled for a major
7 outage in 2012. The four CT's at Polk Power Station are
8 also scheduled for outages over the next several years.
9 Finally there will be scheduled outage requirements for
10 the five new CT's following their installation in 2009.

11
12 **Q.** To summarize, do you agree with Mr. Pollock's analysis
13 and conclusions recommending that Tampa Electric recover
14 only \$12.2 million for planned outages rather than the
15 company's projected \$20.2 million?

16
17 **A.** No. His analysis is flawed and incomplete. Overall, the
18 test year's scheduled outage O&M expenses of \$20.2
19 million are reasonable and prudent for inclusion.

20
21 **Q.** Did you find any errors in Mr. Schultz's testimony as it
22 relates to generation outages and production costs?

23
24 **A.** Yes I did. Mr. Schultz performed an analysis of
25 generation maintenance expense using historical expenses

1 from 2003 through 2009 for the three generation
2 maintenance accounts 511, 512 and 513 and compared these
3 to the budgeted test year expenses to determine
4 reasonableness. Unlike Mr. Pollock, he did index
5 historical expenses to account for escalation using
6 published indices. However, when he compared historical
7 data with the company's 2009 projected expenses, he did
8 not recognize that Account 511 was abnormally high due to
9 the Big Bend channel dredging expense. As I described
10 above, the company expects to incur a \$6.9 million
11 expense for dredging and the entire amount was included
12 in Account 511 for 2009. Since channel dredging
13 typically occurs every five years, the company
14 subsequently made a pro forma adjustment to remove \$5.5
15 million of the \$6.9 million to reach an annual amount of
16 \$1.4 million. Therefore, the effective 2009 total
17 generation maintenance expense (the total of Accounts
18 511, 512 and 513) is \$63.631 million, not \$69.151 million
19 as shown on his exhibit. Once this correction is made,
20 Mr. Schultz's allowable expenses of \$60.671 million
21 should be compared to the adjusted expense total of
22 \$63.631 million. Mr. Schultz's own methodology (which
23 the company disagrees with) would only result in a
24 recommended disallowance of \$2.96 million, which is less
25 than five percent of company's projected generation

1 maintenance expenses included in the 2009 test year. The
2 company based its projected expense on better known
3 information and it is appropriate, even when compared to
4 the historical averaging method used by Mr. Schultz.

5
6 **SUMMARY OF REBUTTAL TESTIMONY**

7 **Q.** Please summarize your rebuttal testimony.

8
9 **A.** My rebuttal testimony points out errors and shortcomings
10 in the testimonies of Messrs. Schultz, Larkin, and
11 Pollock. Their assumptions and calculations had several
12 errors that led them to incorrect conclusions about the
13 Big Bend Station rail facilities, the five CTs scheduled
14 to go in service in May and September 2009, and
15 generation outage schedules and expenses for 2009. None
16 of their recommended adjustments are appropriate.

17
18 **Q.** Does this conclude your rebuttal testimony?

19
20 **A.** Yes, it does.
21
22
23
24
25

TAMPA ELECTRIC COMPANY
DOCKET NO. 080317-EI
WITNESS: HORNICK
REBUTTAL EXHIBIT NO. __ (MJH-2)

REBUTTAL EXHIBIT

OF

MARK J. HORNICK

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**Tampa Electric Company
Total Planned Outages – All Plants**

