

**REDACTED**

**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  
JOANN T. WEHLE**

DOCUMENT NUMBER - DATE

11652 DEC 17 88

FPSC - COMMISSION CLERK



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BEFORE THE PUBLIC SERVICE COMMISSION

REBUTTAL TESTIMONY

OF

JOANN T. WEHLE

1  
2  
3  
4  
5  
6 Q. Please state your name, business address, occupation and  
7 employer.

8  
9 A. My name is Joann T. Wehle. 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, Wholesale Marketing & Fuels.

13  
14 Q. Are you the same Joann T. Wehle 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  
22 serious errors and shortcomings in the prepared direct  
23 testimony of witness Hugh Larkin, Jr. testifying on  
24 behalf of the Citizens of the State of Florida related to  
25 the appropriateness of rail facilities at Big Bend

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1 Station and fuel inventory valuation.

2

3 **Q.** Have you prepared an exhibit supporting your rebuttal  
4 testimony?

5

6 **A.** Yes, I have. My Rebuttal Exhibit No. \_\_ (JTW-2) was  
7 prepared under my direction and supervision. It  
8 consists of the following two documents:

9 Document No. 1 Excerpt from Order PSC-04-0999-FOF-  
10 EI in Docket No. 031033-EI

11 Document No. 2 Hill & Associates, Inc. Rail  
12 Feasibility Study - Executive  
13 Summary

14

15 **Q.** Please summarize the key concerns and disagreements you  
16 have regarding the substance of Mr. Larkin's testimony.

17

18 **A.** My key concerns and disagreements are that:

19 • Mr. Larkin makes several false assumptions about the  
20 company's planned rail facilities at Big Bend Station  
21 which result in an unwarranted adjustment to Tampa  
22 Electric's revenue requirement.

23

24 • Mr. Larkin arbitrarily reduces the fuel stock value  
25 component of the company's working capital request to

1 reflect perceived fuel price reductions. Mr. Larkin  
2 based his unwarranted adjustment on the assumption  
3 that the values Tampa Electric uses are inflated when  
4 they are not.

5  
6 **RAIL FACILITIES**

7 **Q.** In reference to the rail facilities at Big Bend Station,  
8 Mr. Larkin denotes that a solicitation for coal and solid  
9 fuel transportation was conducted. Can you please  
10 elaborate on the requirements of this solicitation?

11  
12 **A.** Yes. As part of Order PSC-04-0999-FOF-EI issued on  
13 October 12, 2004 in Docket No. 031033-EI ("the Order"),  
14 the Florida Public Service Commission ("Commission"),  
15 among other things, outlined requirements for the  
16 company's next competitive bidding process in connection  
17 with solid fuel transportation. This competitive bidding  
18 process occurred in 2007 and 2008. The pertinent portion  
19 of the Order is included as Document No. 1 of my rebuttal  
20 exhibit.

21  
22 Another requirement of the Order was that Tampa Electric  
23 was to conduct a study on the feasibility for bimodal  
24 transportation. The company hired Hill & Associates to  
25 conduct the study in 2005 and the executive summary of

1 the study is included as Document No. 2 of my rebuttal  
2 exhibit. The complete study was made available to Office  
3 of Public Counsel, Staff and all other parties in 2005.

4  
5 **Q.** Did Tampa Electric comply with all of the requirements of  
6 the Order and what were the results of this competitive  
7 bidding process?

8  
9 **A.** Yes. The Commission recently made its determination in  
10 Docket 080001-EI ("Fuel Docket") that the company had  
11 conducted a competitive solicitation process as required  
12 by the Order. As a result of the process, the company  
13 awarded solid fuel transportation contracts to three  
14 bidders: United Maritime Group, AEP Memco, and CSX  
15 Transportation ("CSX").

16  
17 **Q.** Please provide more information about the rail  
18 feasibility study that was required by the Order.

19  
20 **A.** A rail feasibility study was conducted by Hill &  
21 Associates in 2005, and Tampa Electric filed it with the  
22 commission. The study was a comprehensive review of all  
23 possible coal sources that meet the company's quality  
24 specifications and the associated costs of delivering  
25 those coals by rail or by water to Tampa Electric's

1 generating stations. The conclusion of the study was  
2 that there are certain coals that are more cost effective  
3 when delivered via rail. The company's recent  
4 competitive bid solicitation supported these same  
5 conclusions.

6  
7 **Q.** What benefits did the company determine exist from a rail  
8 provider?

9  
10 **A.** Tampa Electric determined that bimodal solid fuel  
11 transportation to Big Bend Station affords the company  
12 and its customers 1) access to more potential coal  
13 suppliers providing a more competitive, overall delivered  
14 cost, 2) the flexibility to switch to either water or  
15 rail in the event of a transportation breakdown or  
16 interruption on the other mode, and 3) competition for  
17 solid fuel transportation contracts for future periods.

18  
19 **Q.** Did the Commission agree that there are company and  
20 customer benefits by contracting with CSX?

21  
22 **A.** Yes, it did. In the Fuel Docket, the Commission  
23 determined that the company had performed a competitive  
24 procurement process with a beneficial outcome for its  
25 customers.

1 Q. In order to begin taking delivery of solid fuels at Big  
2 Bend Station, what infrastructure is required?

3  
4 A. As described in the direct testimony of Tampa Electric  
5 witness Mark Hornick, the company is required to  
6 construct rail facilities. The facilities must be built  
7 and tested in 2009 to begin taking delivery by January 1,  
8 2010. These facilities will benefit customers for, at a  
9 minimum, the five-year term of the contract.

10  
11 Q. Mr. Larkin states in his testimony on page 21 that the  
12 rail carrier stands to benefit from the movement of  
13 additional coal and it would be appropriate for it to  
14 absorb some of the needed facility costs, which is common  
15 practice. Please comment on this statement.

16  
17 A. I understand that railroads have absorbed costs or  
18 contributed financially to the construction of rail  
19 facilities but I am not aware of how often this  
20 arrangement has occurred with railroads. In Tampa  
21 Electric's contract with CSX, there is a provision for a  
22 per ton refund in consideration for the construction of  
23 the rail facilities [REDACTED]. Tampa  
24 Electric proposes that it use the refund to first offset  
25 the capital costs associated with the facilities that are



1 in excess of those granted in base rates with any  
2 remainder being credited to customers through the fuel and  
3 purchase power cost recovery clause.

4  
5 **FUEL INVENTORY VALUATION**

6 **Q.** What adjustment to the company's fuel inventory value  
7 does Mr. Larkin recommend in his direct testimony and  
8 why?

9  
10 **A.** On page 35 of his testimony, Mr. Larkin reduces the fuel  
11 stock value 10 percent or \$9.493 million. His reasoning  
12 is that the 10 percent reduction reflects current  
13 reductions "which might have occurred in coal, oil and  
14 gas prices" (emphasis added).

15  
16 **Q.** Is this adjustment appropriate?

17  
18 **A.** No it is not. His proposed adjustment is based on a  
19 baseless and arbitrary assumption and he admits it. Mr.  
20 Larkin states on page 35, lines 21 through 23 that "The  
21 adjustment I have made does not accurately reflect an  
22 estimate of the decline in fuel prices because I do not  
23 have all necessary information available to me." Clearly  
24 he is not in a position to make such an adjustment.

25

1 Q. Are the values for fuel inventory represented in your  
2 direct testimony still appropriate?

3  
4 A. Yes, they are. The company utilized fuel pricing from  
5 the spring of 2008, which is still representative of  
6 projected fuel prices.

7  
8 Q. How do the fuel prices included in your direct testimony  
9 compare to the company's 2009 fuel filings approved in  
10 the Fuel Docket?

11  
12 A. The estimated 2009 fuel prices I use in this proceeding  
13 are actually lower for coal inventory than the updated  
14 projections approved in the Fuel Docket. Coal represents  
15 approximately 85 percent of the total value of fuel  
16 inventory as shown in Document No. 4 of Exhibit No. \_\_\_  
17 (JTW-1) of my direct testimony. The values of the other  
18 commodities, natural gas, and fuel oil, which represent  
19 the remaining 15 percent of fuel inventory, are in line  
20 with the fuel pricing approved in the Fuel Docket. Using  
21 Mr. Larkin's methodology of "re-pricing fuel stock  
22 inventory to accurately reflect the current price of  
23 fuel", one could easily justify an increase, not a  
24 decrease, in the overall value of fuel stock. Therefore,  
25 the fuel prices used in the company's inventory valuation

1 are conservative and appropriate for this proceeding.

2

3 **SUMMARY OF REBUTTAL TESTIMONY**

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

5

6 **A.** Tampa Electric conducted both a comprehensive feasibility  
7 study on bimodal transportation and a solid fuel  
8 competitive bidding process for the delivery of coal in  
9 accordance with the Order. The bid process and the  
10 resulting transportation contracts supported the  
11 feasibility study's conclusions that adding coal  
12 delivered by rail to the company's portfolio will enhance  
13 the company's solid fuel transportation network for the  
14 benefit of customers. Therefore, the facilities are the  
15 result of Commission direction and constructing the Big  
16 Bend Station rail facilities is appropriate and  
17 necessary. In addition, the company's fuel inventory is  
18 valued appropriately.

19

20 **Q.** Does this conclude your rebuttal testimony?

21

22 **A.** Yes, it does.

23

24

25

TAMPA ELECTRIC COMPANY  
DOCKET NO. 080317-EI  
WITNESS: WEHLE  
REBUTTAL EXHIBIT NO. \_\_\_ (JTW-2)

REBUTTAL EXHIBIT

OF

JOANN T. WEHLE

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Excerpt from Order No. PSC-04-0999-FOF-EI  
Docket No. 031033-EI

V. ADDITIONAL MATTERS

*(This is an excerpt from this Section V and, as such, does not contain all of the paragraphs of Section V)*

As noted above, we believe that the best tool for determining a market rate for coal transportation services is an open, competitive RFP process. Thus, whether Tampa Electric chooses to rebid all or any portion of its existing coal transportation requirements prior to, or in connection with, the termination of its current contract with TECO Transport, we believe that Tampa Electric must conduct any such rebid through an open competitive RFP process. We believe that our findings in part III of this order should provide Tampa Electric guidance in shaping this process. In particular, we find that Tampa Electric shall, at a minimum, incorporate the following in establishing a competitive bid process:

1. Consider all sources of coal, both foreign and domestic;
2. Consider all practical modes of transportation, including rail;
3. State neutrality regarding a preference for integrated bids;
4. State that less than full requirements bids are acceptable;
5. Provide parties to the fuel and purchased power cost recovery clause docket and Commissions staff a copy of the RFP at least six weeks prior to its release

to potential respondents to provide an opportunity for review and comment;

6. Conduct a pre-bid meeting with potential respondents;
7. Allow a minimum of eight weeks for filing a bid response to the RFP;
8. Require the incumbent carrier(s) to submit a bid response to the RFP under the same rules as all other respondents;
9. Indicate how Tampa Electric will grade and evaluate the bid responses; and
10. Justify any deviation from the above guidelines.

If we determine after such a process is conducted that the process did not produce any competitive bids or did not result in a valid market price for coal transportation services, Tampa Electric shall petition us for approval of an alternative regulatory mechanism. At this point, we believe it is premature to specify precisely how such alternatives should be structured.

In addition, we find that Tampa Electric shall, in advance of any future RFP, file with this Commission the following:

1. Its schedule for procuring coal transportation services, from drafting the RFP to signing an agreement or agreements for coal transportation services; and

2. A proposal on an alternative regulatory mechanism to be adopted if the RFP process does not produce competitive bids.

As noted above, the record indicates that Tampa Electric did not fully or aggressively explore its options regarding the delivery of coal by rail. Tampa Electric did not solicit coal transportation from all feasible coal supply basins by all feasible transportation modes. Instead, Tampa Electric limited responses to its RFP to waterborne carriers which could transport coal from Midwestern domestic sources to the Big Bend Station. Specifically, Tampa Electric did not solicit coal, deliverable by rail or barge, from Northern Appalachia, or coal, deliverable by rail from the Illinois Basin. As a result, we find that Tampa Electric shall perform a study to determine whether procuring coal from rail-origin mines is feasible for Tampa Electric. Such feasibility study shall include the following components:

1. Determine, by mine location, which types of coal Tampa Electric can burn or gasify at its Big Bend and Polk Stations, respectively;
2. For each mine location, determine whether the mine is accessible to Tampa Electric by barge, rail or both;
3. Estimate the additional costs associated with transporting coal by barge as described in CSXT witness Sansom's testimony
4. For each mine identified in item 1 which Tampa Electric can access by both barge and rail, compare the comprehensive costs (including those costs identified in item 3) to transport coal for each mode from the mine to Big Bend Station and Polk Station;
5. Determine the costs associated with rail unloading equipment necessary at the Big Bend and Polk



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Stations for Tampa Electric to accept up to 50 percent of its annual coal requirements by rail; and

6. Determine the costs associated with rail unloading equipment necessary at the Big Bend and Polk Stations for Tampa Electric to accept up to 100 percent of its annual coal requirements by rail.

Tampa Electric shall file this feasibility study in our fuel and purchased power cost recovery clause docket no later than 180 days after the date of this order. (see note below)

By ORDER of the Florida Public Service Commission this 12<sup>th</sup> day of October, 2004.

*Note: The Staff worked with Tampa Electric to allow the company until June 2005 for the completion and final submittal to Staff of the comprehensive rail feasibility study.*

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**Determination of Delivered Cost of Coals  
From the Illinois Basin and Northern Appalachian Coal Regions  
To Tampa Electric Company's  
Big Bend Station and Polk Station**

**June 2005**

## I. EXECUTIVE SUMMARY

Hill & Associates, Inc. ("H&A") is an internationally known management-consulting firm that specializes in providing clients with expert advice in the areas of domestic and international coal markets, prices, forecasts, strategies, mining, geology, transportation, and related subjects. The firm's headquarters are in Annapolis, Maryland, and branch offices are located in Colorado, West Virginia, and North Carolina. The principals of the firm each have over 25 years of experience in the coal and/or utility industries and have degrees in business administration, geology, mining engineering, industrial engineering, chemical engineering, and chemistry. Most of the firm's consulting staff members have also earned advanced degrees. H&A owns Energy Publishing LLC, a Tennessee company that publishes coal databases, newsletters, and other products relating to coal and transportation prices and markets. More information on the firm is available at [www.hillandassoc.com](http://www.hillandassoc.com).

Tampa Electric engaged H&A to conduct a rail feasibility study to determine whether procuring coal from rail origin mines is feasible and cost effective if Tampa Electric were to accept up to 50 percent of its annual coal requirements by rail and up to 100 percent of its annual coal requirements by rail. Analysis of these two volume scenarios was required by a 2004 Florida Public Service Commission order. H&A was asked to identify the sources of coals Tampa Electric can burn or gasify; determine whether the mines are accessible by barge, rail, or truck; and compare comprehensive costs for transportation under each available option. H&A recommends that Tampa Electric should not limit its options to consider only these two volume scenarios in deciding upon its optimal amount of rail and waterborne deliveries.

Given the technical nature of certain industry terms in this report and the use of industry specific acronyms, the report includes a detailed glossary of terms in Section VIII of the report.

In conducting the feasibility study, H&A analyzed the costs relating to potential rail and barge deliveries of coal from various mines in the Illinois Basin ("ILB") and Northern Appalachian ("NAPP") regions to Tampa Electric's Big Bend and Polk Stations ("Stations"). This study focused on comparing the costs of delivering coal to the Stations by the following alternatives:

- Barge delivery to TECO Bulk Terminal, with final delivery by ocean barge to Big Bend Station, or ocean barge to Big Bend Station with trans-loading into truck for final delivery to Polk Station;
- Rail delivery by CSX to Kinder Morgan's Tampaplex bulk terminal in Tampa, Florida, for final delivery by truck to the Stations; and
- Rail delivery by CSX directly to the Stations.

For each mine that met Tampa Electric's quality specifications and selected other mines from which Tampa Electric has purchased coal in the past, H&A determined a

transportation path that could provide delivery of the coal to the Stations for the waterborne and rail delivery cases. H&A then calculated a total delivered cost for each case, considering the mine price plus all transportation cost components that would be incurred for such deliveries. The facility requirements for blending different coals to achieve Tampa Electric's quality specifications were not considered.

H&A used Tampa Electric's second quarter 2005 rates under its existing contract with TECO Transport to estimate the total delivered costs of coals delivered via the waterborne alternative. These rates are not the adjusted rates that include a disallowance for the river and ocean segments, which Tampa Electric uses for cost recovery purposes based upon a 2004 Florida Public Service Commission order.

For coals delivered to the Stations by CSX rail, H&A estimated the total delivered cost using the "informational" rail rates contained in CSX's May 18, 2005 letter to Tampa Electric. For deliveries to Tampaplex, H&A used rates furnished to Tampa Electric by CSX in October 2004 and January 2005, escalated to the current period.

H&A used the estimated costs for the installation of rail receipt and unloading facilities ("Facility Costs") provided by the engineering design firm Sargent & Lundy, amortized over 20 years, with a zero cost of capital. H&A added these amortized costs to the total delivered cost for rail shipments to the Stations.<sup>1</sup> H&A considered the 50 percent and 100 percent coal volume scenarios at the Stations.

H&A converted the total delivered cost of coal to the Stations, including Facility Costs, to cents per million Btu in order to compare the candidate coals on an equal basis. The results of H&A's comprehensive analyses are shown in Exhibits 1 and 2.

### **Conclusions**

The largest component of the delivered coal price is often the commodity price. Therefore, future changes in the commodity price and availability of a particular coal may have the most substantial effect on the delivered prices of Tampa Electric's coal purchases.

H&A's analyses reveal that, of the alternatives considered, coal deliveries by rail to Tampaplex do not appear to be the most cost-effective option for either Big Bend Station or Polk Station.

The study determined that most of the candidate coals in both the ILB and NAPP regions were from mines that do not have CSX loading capabilities, and only five of the 31 candidate coal mines have CSX loading capabilities. Therefore, Tampa Electric's coal sourcing would be severely limited if it were to ship all or a significant portion of its coal directly by the CSX. It might also be unable to meet its plant coal quality specifications, or lock itself into higher delivered coal prices because it could become "leveraged" to a CSX-

<sup>1</sup> It is important to note that if coal deliveries by rail are not economical or become unreliable within the 20-year period, Tampa Electric would incur stranded costs associated with the Facility Costs.

rail origin mine if it did not also have waterborne delivery capabilities.

Using the assumptions provided, the study demonstrates that neither 100 percent rail nor 100 percent waterborne delivered coal is the most cost-effective under every scenario. The study confirms that the most cost-effective delivered price of coal varies by mine. Deliveries from one mine may be more cost-effective via a waterborne route, while deliveries from a nearby mine in the same state may be more cost-effective by rail. The most significant determining factors are coal quality, location, and loading capabilities of a specific mine within a given state or coal region.

The study demonstrates that there are significant differences between the total delivered costs for CSX rail direct deliveries using the higher volume case (100 percent of tons) and the lower volume case (50 percent of tons). The higher volume rail delivery case may appear to be more cost-effective than waterborne for a particular mine, but this may not hold true for the lower volume case. Therefore, it is important to determine which case is the most relevant for comparing the cost of CSX rail direct deliveries with waterborne deliveries.

H&A strongly recommends against the reliance upon the railroad for 100 percent of the coal deliveries to Big Bend Station or Polk Station. The recent service level of the railroads is a sufficient reminder of the danger of a 100 percent rail delivery strategy. Some utility coal inventories are dangerously low, and their stockpiles are reportedly not recovering because the railroads have not delivered coal in a timely manner.

Furthermore, many railroads reportedly do not have enough track infrastructure, railcars, locomotives, and labor to increase their delivery capacity to the extent needed. Given CSX's reported service level and the time needed to make significant improvements, one must question whether CSX could reliably service a significant amount of new business.

Additionally, the railroads have made it evident in recent months that they intend to significantly increase rail rates, which has been demonstrated by reported increases for Progress Energy Carolinas, Duke Energy, and South Carolina Electric & Gas. H&A questions whether CSX will honor the rates quoted to Tampa Electric in July 2003, which it later withdrew, and then recently updated by escalating them to the second quarter of 2005. In its May 18, 2005 letter to Tampa Electric, CSX did not affirm that it would honor such rates, but instead provided "informational" rates that would "illustrate the contractual rates that would have been in place between CSX and Tampa Electric...if Tampa Electric had accepted the offer" made by CSX on July 30, 2003. The footnote on the rate schedule also states that these rates are "Based upon the expired and withdrawn CSX offer of July 30, 2003." H&A used these "informational" rates for purposes of this study but is not convinced that Tampa Electric can rely upon such rates. Transitioning to 100 percent rail deliveries could place Tampa Electric in a highly disadvantageous position, as railroads can exert tremendous monopoly pricing power, and such a transition could keep Tampa Electric from sourcing coals from mines with much lower, barge-delivered costs, as is evidenced in the study.

If Tampa Electric decides to pursue a rail-delivered option, H&A believes that it should also maintain barge deliveries to the Stations. The study confirms that TECO Transport is a strategically advantageous fuel carrier to the Stations, as it is often the lower cost transportation provider. The study also shows that there are few CSX-origin mines in Tampa Electric's typical coal source regions, which are dictated by the quality specifications required by its Stations' designs. The additional costs of transferring coal to a CSX delivery point raises the total delivered costs for most candidate mines such that rail transportation is not competitive with waterborne transportation. For these coal production regions, H&A recommends that Tampa Electric continue to maintain a significant portion of its fuel deliveries by the waterborne method.

Given that the high and low volume cases were the only two cases required for evaluating the feasibility of rail coal deliveries to the Stations, H&A concludes that of these two scenarios, the low volume case (50 percent of tons) provides the best result of potential cost savings and delivery flexibility. H&A believes that it could be advantageous to Tampa Electric to receive a mix of coal deliveries by barge and rail. Such a delivery mix could broaden Tampa Electric's fuel source options and convey the potential for lower delivered costs from some rail-served mines. H&A has not concluded that the 50 percent case represents an appropriate amount of rail deliveries. An appropriate balance of rail and waterborne deliveries for Tampa Electric should be determined by utilizing a procurement process that weighs all applicable data, including commodity availability, prices, and costs; mine reliability; quality specifications; environmental and operational requirements; and transportation reliability and costs.