

AUSLEY & McMULLEN

ATTORNEYS AND COUNSELORS AT LAW

123 SOUTH CALHOUN STREET
P.O. BOX 391 (ZIP 32302)
TALLAHASSEE, FLORIDA 32301
(850) 224-9115 FAX (850) 222-7560

March 28, 2014

VIA: ELECTRONIC FILING

Ms. Carlotta S. Stauffer
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

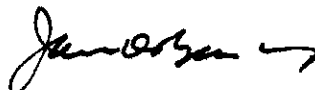
Re: Fuel and Purchased Power Cost Recovery Clause with Generating
Performance Incentive Factor; FPSC Docket No. 140001-EI

Dear Ms. Stauffer:

Attached for filing in the above docket on behalf of Tampa Electric Company is the Prepared Direct Testimony of J. Brent Caldwell and accompanying Exhibit No. ____ (JBC-1), identified as 2013 Hedging Activity True-Up.

Thank you for your assistance in connection with this matter.

Sincerely,



James D. Beasley

JDB/pp
Attachment

cc: All parties of record (w/attachment)

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Testimony and Exhibit JBC-1 of Brent Caldwell has been furnished by hand delivery (*) or electronic mail on this 28th day of March 2014, to the following:

Ms. Martha F. Barrera*
Ms. Theresa Farley
Ms. Julia Gilcher
Senior Attorney
Office of the General Counsel
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850
mbarrera@psc.state.fl.us
tefarley@psc.state.fl.us
jgilcher@psc.state.fl.us

Mr. John T. Burnett
Ms. Dianne M. Triplett
Duke Energy Florida, Inc.
Post Office Box 14042
St. Petersburg, FL 33733
John.burnett@duke-energy.com
Dianne.triplett@duke-energy.com

Mr. Matthew R. Bernier
Mr. Paul Lewis, Jr.
Duke Energy Florida, Inc.
106 East College Avenue
Suite 800
Tallahassee, FL 32301-7740
matthew.bernier@duke-energy.com
paul.lewisjr@duke-energy.com

Mr. Jon C Moyle, Jr.
Moyle Law Firm
118 N. Gadsden Street
Tallahassee, FL 32301
jmoyle@moylelaw.com

Ms. Patricia A. Christensen
Associate Public Counsel
Office of Public Counsel
111 West Madison Street – Room 812
Tallahassee, FL 32399-1400
christensen.patty@leg.state.fl.us

Mr. Robert L. McGee, Jr.
Regulatory and Pricing Manager
Gulf Power Company
One Energy Place
Pensacola, FL 32520-0780
rlmcgee@southernco.com

Ms. Beth Keating
Gunster, Yoakley & Stewart, P.A.
215 S. Monroe St., Suite 601
Tallahassee, FL 32301
bkeating@gunster.com

Mr. John T. Butler
Assistant General Counsel - Regulatory
Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408-0420
john.butler@fpl.com

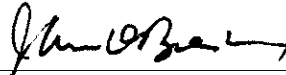
Mr. Kenneth Hoffman
Vice President, Regulatory Relations
Florida Power & Light Company
215 South Monroe Street, Suite 810
Tallahassee, FL 32301-1859
ken.hoffman@fpl.com

Ms. Cheryl Martin
Director/Regulatory Affairs
Florida Public Utilities Company
1641 Worthington Road, Suite 220
West Palm Beach, FL 33409
Cheryl_Martin@fpuc.com

Mr. Jeffrey A. Stone
Mr. Russell A. Badders
Mr. Steven R. Griffin
Beggs & Lane
Post Office Box 12950
Pensacola, FL 32591-2950
jas@beggslane.com
rab@beggslane.com
srg@beggslane.com

Mr. Robert Scheffel Wright
Mr. John T. LaVia, III
Gardner, Bist, Wiener, Wadsworth,
Bowden, Bush, Dee, LaVia & Wright, P.A.
1300 Thomaswood Drive
Tallahassee, FL 32308
Schef@gbwlegal.com
Jlavia@gbwlegal.com

Mr. James W. Brew
Mr. F. Alvin Taylor
Brickfield, Burchette, Ritts & Stone, P.C.
1025 Thomas Jefferson Street, NW
Eighth Floor, West Tower
Washington, D.C. 20007-5201
jbrew@bbrslaw.com
ataylor@bbrslaw.com



ATTORNEY



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 140001-EI
IN RE: FUEL & PURCHASED POWER COST RECOVERY
AND
CAPACITY COST RECOVERY

2013 HEDGING ACTIVITY TRUE-UP

TESTIMONY AND EXHIBIT

J. BRENT CALDWELL

FILED: MARCH 28, 2014

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **PREPARED DIRECT TESTIMONY**

3 **OF**

4 **J. BRENT CALDWELL**

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

8
9 **A.** My name is J. Brent Caldwell. My business address is
10 702 N. Franklin Street, Tampa, Florida 33602. I am
11 employed by Tampa Electric Company ("Tampa Electric" or
12 "company") as Director of Bulk Fuel and Power.

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

16
17 **A.** I received a Bachelor Degree in Electrical Engineering
18 from Georgia Institute of Technology in 1985 and a
19 Master of Science in Electrical Engineering in 1988 from
20 the University of South Florida. I have 20 years of
21 utility experience with an emphasis in state and federal
22 regulatory matters, fuel procurement and transportation,
23 fuel logistics and cost reporting, and business systems
24 analysis. In October 2010, I assumed responsibility for
25 long term fuel origination.

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

3

4 **A.** Yes. I have previously testified before this Commission
5 in Docket No. 120234-EI regarding the company's fuel
6 procurement and delivery strategy for the Polk 2-5
7 Combined Cycle Conversion.

8

9 **Q.** Please state the purpose of your testimony.

10

11 **A.** The purpose of my testimony is to present, for the
12 Commission's review, information regarding the 2013
13 results of Tampa Electric's risk management activities,
14 as required by the terms of the stipulation entered into
15 by the parties to Docket No. 011605-EI and approved by
16 the Commission in Order No. PSC-02-1484-FOF-EI.

17

18 **Q.** Do you wish to sponsor an exhibit in support of your
19 testimony?

20

21 **A.** Yes. Exhibit No. ____ (JBC-1), entitled Tampa Electric's
22 2013 Hedging Activity True-up, was prepared under my
23 direction and supervision. This report explains the
24 company's risk management activities and results for the
25 calendar year 2013.

1 Q. What is the source of the data you present in your
2 testimony in this proceeding?

3

4 A. Unless otherwise indicated, the source of the data is
5 the books and records of Tampa Electric. The books and
6 records are kept in the regular course of business in
7 accordance with generally accepted accounting principles
8 and practices, and provisions of the Uniform System of
9 Accounts as prescribed by this Commission.

10

11 Q. What were the results of Tampa Electric's risk
12 management activities in 2013?

13

14 A. As outlined in Tampa Electric's 2013 Hedging Activity
15 True-up, filed as an exhibit to this testimony, the
16 company follows a non-speculative risk management
17 strategy to reduce fuel price volatility while
18 maintaining a reliable supply of fuel. In particular,
19 Tampa Electric established a financial hedging program
20 to limit customers' exposure to spikes in the price of
21 natural gas. Over time, this program has been enhanced
22 as Tampa Electric's gas needs have evolved and grown.
23 All enhancements have been reviewed and approved by the
24 company's Risk Authorization Committee.

25

1 The report indicates that Tampa Electric's 2013 hedging
2 activities resulted in a net loss of approximately \$3.3
3 million. Tampa Electric followed the plan objective of
4 reducing price volatility while maintaining a reliable
5 fuel supply. Natural gas prices declined in 2013 due to
6 lower demand as a result of the mild winter of
7 2012/2013, ongoing economic softness, and an abundance
8 of natural gas supply from non-conventional, shale gas
9 production.

10
11 **Q.** Does Tampa Electric implement physical hedges for
12 natural gas?

13
14 **A.** No, Tampa Electric does not hedge natural gas pricing
15 through physical gas supply contracts. Tampa Electric
16 does hedge its natural gas supply through
17 diversification. Tampa Electric also physically hedges
18 its supply through the use of a variety of sources,
19 delivery methods, inventory locations and contractual
20 terms to enhance the company's supply reliability and
21 flexibility to cost-effectively meet changing
22 operational needs.

23
24 Tampa Electric continually pursues new creditworthy
25 counterparties and maintains contracts for gas supplies

1 from various regions and on different pipelines. The
2 company also contracts for pipeline capacity to access
3 non-conventional shale gas production which is less
4 sensitive to interruption by hurricanes. Additionally,
5 Tampa Electric has storage capacity with Bay Gas Storage
6 near Mobile, Alabama. All of these actions enhance the
7 effectiveness of Tampa Electric's gas supply portfolio.
8

9 **Q.** Does Tampa Electric use a hedging information system?
10

11 **A.** Yes, Tampa Electric continues to use Sungard's Nucleus
12 Risk Management System ("Nucleus"). Nucleus supports
13 sound hedging practices with its contract management,
14 separation of duties, credit tracking, transaction
15 limits, deal confirmation, risk exposure analysis and
16 business report generation functions. The Nucleus
17 system records all financial natural gas hedging
18 transactions, and the system calculates risk management
19 reports. In 2013, Tampa Electric initiated a project to
20 upgrade or replace Nucleus. The natural gas portion of
21 this project is projected to be completed by the end of
22 2014.
23

24 **Q.** Did the company use financial hedges for commodities
25 other than natural gas in 2013?

1 **A.** No. Tampa Electric did not use financial hedges for
2 commodities other than natural gas in 2013.

3
4 Tampa Electric's generation comprises mostly coal and
5 natural gas. The price of coal has historically been
6 stable compared to the prices of oil and natural gas.
7 In addition, there is not an organized, nor a liquid,
8 market for financial hedging instruments for the high-
9 sulfur Illinois Basin coal that Tampa Electric uses at
10 Big Bend Station, its largest coal-fired generation
11 facility.

12
13 Tampa Electric consumes a small amount of oil; however,
14 its low and erratic usage pattern makes price hedging
15 impractical.

16
17 Similarly, Tampa Electric did not use financial hedges
18 for wholesale power transactions because a liquid,
19 published market does not exist for power in Florida.

20
21 **Q.** How does Tampa Electric assure physical supply of other
22 commodities?

23
24 **A.** Tampa Electric assures sufficient physical supply of
25 coal and oil through supply diversification, inventory

1 sufficiency, and delivery flexibility for coal. For
2 coal, the company enters into a portfolio of contracts
3 with differing terms and various suppliers to obtain the
4 types of coal used in its electric generation system.
5 This is of particular importance because of increasing
6 competition for Illinois Basin coal supply. This
7 increased competition comes from domestic utilities that
8 have added sulfur dioxide scrubbers to their coal plants
9 and from the international market. This competition for
10 low cost supply puts greater emphasis on the need for a
11 robust coal supply portfolio.

12
13 Additionally in 2009, Tampa Electric added rail delivery
14 capability for coal to Big Bend Station. The addition
15 of rail to the existing waterborne transportation
16 facilities enhanced Tampa Electric's access to coal
17 supply and increased delivery reliability.

18
19 For oil, Tampa Electric fills its oil tanks prior to
20 entering hurricane season to reduce exposure to supply
21 or price issues that may arise during hurricane season.
22 Competition for potentially limited oil supplies and oil
23 transportation during a crisis emphasizes the need for
24 maintaining sufficient inventory.

25

1 Q. What is the basis for your request to recover the
2 commodity and transaction costs described above?

3

4 A. Tampa Electric requests cost recovery pursuant to the
5 Commission Order No. PSC-02-1484-FOF-EI, in Docket No.
6 011605-EI:

7 Each investor-owned electric utility shall
8 be authorized to charge/credit to the fuel
9 and purchased power cost recovery
10 clause its non-speculative, prudently-
11 incurred commodity costs and gains and
12 losses associated with financial and/or
13 physical hedging transactions for natural
14 gas, residual oil, and purchased power
15 contracts tied to the price of natural gas.

16

17 Q. Does this conclude your testimony?

18

19 A. Yes, it does.

20

21

22

23

24

25

J. BRENT CALDWELL

EXHIBIT

2013 HEDGING ACTIVITY TRUE-UP

Tampa Electric 2013 Hedging Activity True-up

Tampa Electric's Risk Management Plan identified the following objectives:

- **Qualitative Objectives**
Tampa Electric's primary goal in managing risk associated with fuel or power purchases focuses on minimizing supply risk to ensure reliability of electric service to its customers at a reasonable price. To the extent that price risk can be mitigated without compromising supply reliability or imposing unreasonable costs on its customers, Tampa Electric is committed to executing strategies to accomplish its risk management goal.

- **Quantitative Objectives**
Tampa Electric's quantitative objective is to prudently manage its fuel and wholesale energy procurement activities so as to minimize the variance from projected expenditures while taking advantage of cost-saving opportunities that do not result in increased supply risk. Tampa Electric has established a portfolio of fuel and purchased power products with creditworthy counterparties for known volumes and prices.

2013 Risk Management Activities

The company's activities in 2013 that supported the objectives listed above are described in the following section.

- **Coal Purchases**
Tampa Electric maintains a portfolio of short-term (also called spot market), medium-term and long-term coal contracts with the goal of minimizing fuel costs and price risk while maintaining reliability of supply. The company procured all of its 2013 coal needs from suppliers with known, established pricing. Thus, the cost for the commodity was known. Tampa Electric continued to monitor deliveries and volume commitments in contracts as the pricing in the coal market changed. Tampa Electric takes advantage of favorable spot market pricing when the coal supply is needed. Coal was used to produce approximately 59 percent of the electricity the company generated in 2013.

- **Coal Risk Management Activities**
Tampa Electric's long-established policy of using physical hedges within its portfolio of different term coal supply contracts continued to help protect ratepayers from coal price volatility.

➤ **Natural Gas Purchases**

In 2013, approximately 41 percent of the electricity Tampa Electric generated was produced using natural gas. Tampa Electric's risk management strategy continues to focus on supply reliability and price volatility reduction. The components critical to the success of the natural gas purchasing strategy are as follows:

- Execution of the natural gas hedge plan approved by the Risk Authorizing Committee;
- Maintaining liquidity by contracting with numerous qualified counterparties;
- Time horizon for natural gas hedging activity that allows the company to hedge natural gas prices into the future;
- Maintaining a minimum and maximum hedge volume percentage by month into the future;
- Maintaining physical natural gas storage capacity near Mobile Bay, Alabama;
- Diversifying interstate pipeline receipt points;
- Expanding access to additional interstate pipelines;
- Maintaining databases and reports to monitor activity;
- Maintaining coordination between power plant operations and natural gas scheduling;
- Maintaining separation of duties and installation of controls consistent with current industry practices.

➤ **Natural Gas Hedging Activities**

Natural gas prices historically have been more volatile than coal prices. Natural gas prices are more volatile due to the significant variations in natural gas consumption by natural gas fired power plants that increase and decrease generation to follow changes in demand. Additionally, hurricane activity and other weather-related production reductions or demand increases have a significant impact on the natural gas market. Therefore, Tampa Electric continued to use financial instruments to hedge the price of a portion of the natural gas consumed in 2013 to reduce customers' exposure to the volatility of natural gas prices. Tampa Electric used financial floating-price-to-fixed-price swaps to hedge natural gas prices. The costs associated with these instruments are embedded in the price of the instruments and are included in the fuel commodity costs reported by the company. The hedges are described in the following table.

Tampa Electric Company
Natural Gas Hedging Activities
 January 1, 2013 through December 31, 2013

Contract	Type of Hedge	Mark-to-Market Savings/(Loss)	Hedged Volume (MMBtu)	Consumption (MMBtu)	Percent Hedged	Budget Price	Hedge Price	Settle Price
Jan-13	Swap	(\$1,482,130)		4,355,657				\$3.35
Feb-13	Swap	(\$1,744,150)		5,362,808				\$3.23
Mar-13	Swap	(\$828,170)		3,761,758				\$3.43
Apr-13	Swap	\$1,127,945		4,873,898				\$3.98
May-13	Swap	\$1,794,365		5,474,303				\$4.15
Jun-13	Swap	\$1,902,130		6,500,554				\$4.15
Jul-13	Swap	(\$190,245)		4,881,959				\$3.71
Aug-13	Swap	(\$1,208,040)		5,620,214				\$3.46
Sep-13	Swap	(\$710,690)		5,251,411				\$3.57
Oct-13	Swap	(\$871,990)		4,622,892				\$3.50
Nov-13	Swap	(\$756,725)		3,467,202				\$3.50
Dec-13	Swap	(\$288,670)		3,243,907				\$3.82
Total		(\$3,256,370)		57,416,563				

Consistent with Tampa Electric’s non-speculative risk management plan objective, Tampa Electric’s natural gas hedging plan provided price stability and certainty during 2013. For 2013, the calendar year net position for natural gas hedges was slightly above the closing price of natural gas, resulting in a mark-to-market net loss of \$3.3 million. The closing price was less than the fixed hedge price primarily due to a reduction in the price of natural gas during 2013. The price decline was driven primarily by a supply surplus due to higher supply from non-conventional production of shale gas and reduced demand due to mild weather and continued economic weakness.

Tampa Electric maintains natural gas storage capacity of 1,250,000 MMBtu in order to enhance its physical reliability of gas supply. The storage provides Tampa Electric with improved access to “intraday” natural gas when an operational need arises, provides improved hurricane coverage, and can be used to cost-effectively manage swings in gas supply needs during extreme weather conditions, weekends, holidays and unplanned power plant outages.

Tampa Electric also continues to improve its physical access to natural gas supply by diversifying its receipt points along the Gulf Coast and other areas when opportunities arise.

In summary, financial hedging activities for natural gas resulted in a net loss of approximately \$3.3 million in 2013; however, Tampa Electric was successful in reducing price uncertainty and maintaining fuel supply reliability for customers for both its physical and financial hedges.

2013 Market Pricing

Tampa Electric provides a comparison of 2013 fuel prices to the market price for the respective commodity in the following section.

- **Coal**
Coal is a commodity with a great range of quality characteristics. Market indexes provide a guide to current market pricing but are not specific enough to always accurately demonstrate the market price of a particular coal. Market prices for coal are most accurately determined by competitive bid solicitations that specify the required coal quality or characteristics. With the exception of purchases for reliability reasons, short-term purchases for changing plant operation needs and spot market purchases to take advantage of favorable pricing, Tampa Electric purchases coal at prices determined by competitive bid solicitations; therefore, the company's purchases are at market. A comparison of coal contract prices for 2013 to the average acceptable bid price or index price is provided in the following table. Unless otherwise stated, the prices represent the market at the time each contract was entered into and are not representative of today's market. Any comparison to current market prices overlooks the market conditions that existed at the time the coal was procured.

**Tampa Electric
 Coal Contract to Market Indicator Price Comparisons**

Supplier (Mine)	Contract (\$/MMBtu)	Market Indicator (\$/MMBtu)	Difference	Market Indicator Source	Note
Knight Hawk Coal		\$3.07		GEN-2009-01 (issued 12/7/07) (RFP)	1
Warrior Coal		\$3.00		GEN-2009-01 (issued 12/7/07) (RFP)	1
Glencore Ltd.		\$4.43		Polk-LS-2013 (issued 9/27/12) (RFP)	1
Valero Marketing		\$2.82		Polk-PC-2013 (issued 9/24/12) (RFP)	1
Patriot Dodge Hill Mine		\$3.56		ICAP United / Argus Coal Daily 6/14/13 (Index)	3
Trafigura AG		\$3.35		ICAP United / Argus Coal Daily 8/9/13 (Index)	2, 7
Armstrong Coal Company		\$3.62		ICAP United / Argus Coal Daily 8/3/12 (Index)	5
Patriot Coal Company		\$3.50		Big Bend GEN 2013-01 (issued 10/5/12) (RFP)	1
Peabody Coal Company		\$3.14		Big Bend GEN 2013-01 (issued 10/5/12) (RFP)	1, 6
Sunrise Coal		\$3.14		Big Bend GEN 2013-01 (issued 10/5/12) (RFP)	1, 6
Sunrise Coal		\$3.14		Big Bend GEN 2013-01 (issued 10/5/12) (RFP)	1, 6
Patriot 2012SP2-09		\$3.27		ICAP United, Inc - Coal 11/9/2012 (Index)	2
Glencore Ltd.		\$5.55		Polk-LS-2012-01 (issued 7/28/11) (RFP)	1, 4
Valero Marketing		\$3.45		Polk-PC-2012-01 (issued 8/11/11) (RFP)	1

Notes:

The contract \$/MMBTU refers to the initial price of the contract at its inception. This price could be subject to escalation per the terms of the contract.

All prices are determined on a fully delivered basis. Index values have also been calculated on a delivered basis for comparison purposes.

1. The bid solicitation price is the average price submitted of all acceptable coal bids.
2. Pricing based on ICAP United Inc - Daily Coal price index.
3. Coal Pricing based on the average of three Indices. Argus 11,800 3.0lb SO₂, ICAP 11,500 4.5 LbSO₂ and Argus 11,500 Btu 5.0 Lb SO₂
4. While the Glencore \$/MMBtu was [REDACTED], the [REDACTED] yielded the lowest overall cost.
5. 2013 Coal Pricing based on average of three Indices. Argus 11,500 5.0lb SO₂, ICAP 11,500 4.5 LbSO₂ and ICAP 11,800 Btu 4.50 Lb SO₂. Within this agreement are three Tampa Electric call options. Option #1, [REDACTED], Option #2 [REDACTED] and Option #3, [REDACTED].
6. Test burns, Spot contracts purchased from Long Term solicitation.
7. This offer was the only offer available.

- **Natural Gas**
Tampa Electric purchases natural gas at prices that are set by published indexes that reflect the market price. Most of the monthly baseload gas is purchased at a price relative to the New York Mercantile Exchange natural gas futures last day settlement price. Tampa Electric purchases additional baseload gas at monthly index prices published in *Inside FERC, Gas Market Report*. Tampa Electric uses the indexes representing market prices for natural gas on the Gulf Coast that can be transported to Tampa Electric's service area: Henry Hub, Mobile Bay, or Florida Gas Transmission ("FGT") Zone 1, Zone 2 or Zone 3. For daily and short-term natural gas, Tampa Electric typically purchases natural gas based on the FGT index price published in *Gas Daily*. In rare instances, Tampa Electric also purchases small volumes of spot natural gas needed for short durations at fixed prices. Since the price of natural gas Tampa Electric purchases is based upon a published market index, the company's natural gas purchases are at market.

- **No. 2 Oil**
Tampa Electric purchased No. 2 oil for combustion turbines at Polk Station and for Big Bend Station startup. The purchase price is based upon the daily index price published in Platt's *Oilgram* for Gulf Coast Waterborne spot purchases of ultra-low sulfur No. 2 oil. Since the price is determined by the published market index, the price paid by Tampa Electric is at market.

- **No. 6 Oil**
Tampa Electric no longer purchases No. 6 oil for Phillips Station. Phillips Station was placed on long term standby in September 2009.

- **Propane**
Tampa Electric purchases propane for Polk Unit No. 1. The purchase price is based upon the average of daily index prices published by Oil Price Information Service at Mont Belvieu, the primary propane hub for the southern United States. Since the price is determined by the published market index, the price paid by Tampa Electric is at market.