

AUSLEY McMULLEN

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September 17, 2019

HAND DELIVERED

Mr. Adam Teitzman
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance
Incentive Factor; FPSC Docket No. 20190001-EI

Dear Mr. Teitzman:

We submit on behalf of Tampa Electric Company one redacted version of Staff's Audit Work Papers pursuant to Audit Control No. 2019-070-2-2. This filing is being accompanied by a Request for Confidential Classification and Motion for Temporary Protective Order being separately filed this date with your office.

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

JDB/pp
Enclosure

cc: All parties of record (w/o enc.)

RECEIVED-FPSC
2019 SEP 17 PM 2:40

REDACTED

COMMISSIONERS:
ART GRAHAM, CHAIRMAN
JULIE I. BROWN
ANDREW GILES FAY
GARY F. CLARK
DONALD POLMANN

STATE OF FLORIDA



TAMPA DISTRICT OFFICE
1313 N. TAMPA STREET
SUITE 220
TAMPA, FL 33602-3328
(813) 637-8660

Public Service Commission

September 05, 2019

Mrs. Sloan Lewis
Tampa Electric Company
702 Franklin Street
Tampa, FL 33602

RE: Tampa Electric Company – Hedging Activities
Docket No. 20190001-EI – Audit Control No. 2019-070-2-2

Dear Mrs. Lewis,

We have completed our field work in the above-referenced audit. Attached is the audit report.

Please sign and date a copy of this letter and return it to me indicating that you have received the confidential copy of the audit report.

Sincerely,

A handwritten signature in black ink, appearing to read "Intesar Terkawi".

Intesar Terkawi
Audit Manager

Received by:

A handwritten signature in black ink, appearing to be a stylized name.

Tampa Electric Company

9/5/19

Att. To Confidential Letter

Tampa Electric Company
Index of Confidential Workpapers

Docket No. 20190001-EI

Audit Control No. 2019-070-2-2

<u>WP No.</u>	<u>Description / Title of Workpapers</u>	<u>No. of Pages</u>
2 Series	Natural Gas and Oil Hedging Detail	21
12 Series	General Ledger	6
44 Series	Monthly Filing Details	4
45 Series	Samples of Four Months	59
56 Series	Variences	1
58 Series	Seperation of Duties	3

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April 3, 2018

CONFIDENTIAL

VIA: ELECTRONIC FILING

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

Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *filing 09/19 IT*

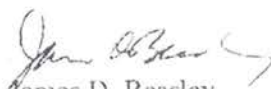
Re: Fuel and Purchased Power Cost Recovery Clause with Generating
Performance Incentive Factor; FPSC Docket No. 20190001-EI

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 2018 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)

SOURCE _____

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *filing 07/19 IT*

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 electronic mail on this 3rd day of April 2019 to the following:

Ms. Suzanne Brownless
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Florida Public Service Commission
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SOURCE _____

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ATTORNEY

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *LH*
filing 07/19IT

SOURCE _____

Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *filing 07/19 IT*



TECO
TAMPA ELECTRIC
AN EMERA COMPANY

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20190001-EI
IN RE: FUEL & PURCHASED POWER COST RECOVERY
AND
CAPACITY COST RECOVERY

CONFIDENTIAL

2018 HEDGING ACTIVITY TRUE-UP

TESTIMONY AND EXHIBIT

J. BRENT CALDWELL

FILED: APRIL 3, 2019

SOURCE

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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 employer.

7
8 A. My name is J. Brent Caldwell. My business address is 702
9 N. Franklin Street, Tampa, Florida 33602. I am employed
10 by Tampa Electric Company ("Tampa Electric" or "company")
11 as Director, Resource Planning.

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

15
16 A. I received a Bachelor's degree in Electrical Engineering
17 from Georgia Institute of Technology in 1985 and a Master
18 of Science degree in Electrical Engineering in 1988 from
19 the University of South Florida. I have over 20 years of
20 utility experience with an emphasis in state and federal
21 regulatory matters, fuel procurement and transportation,
22 fuel logistics and cost reporting, and business systems
23 analysis. In 2017, I assumed responsibility for Portfolio
24 Optimization which includes unit commitment, near-term
25 maintenance planning, and natural gas and wholesale power

SOURCE

2.4

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *4N*
filing 07/19/18

1 trading. In December 2018, I assumed the role of Director
2 Resource Planning.

3
4 Q. Have you previously testified before the Florida Public
5 Service Commission ("FPSC" or "Commission")?

6
7 A. Yes. I have submitted written testimony in the annual fuel
8 docket since 2011. In 2015, I testified in Docket No.
9 20150001-EI regarding natural gas hedging. I have also
10 testified before the Commission in Docket No. 20120234-
11 EI regarding the company's fuel procurement for the Polk
12 2-5 Combined Cycle Conversion project.

13
14 Q. Please state the purpose of your testimony.

15
16 A. The purpose of my testimony is to present, for the
17 Commission's review, information regarding the 2018
18 results of Tampa Electric's risk management activities,
19 as required by the terms of the stipulation entered into
20 by the parties to Docket No. 20011605-EI and approved by
21 the Commission in Order No. PSC-2002-1484-FOF-EI.

22
23 Q. Do you wish to sponsor an exhibit in support of your
24 testimony?

25

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *Filing 07/19/18*

LN

1 A. Yes. Exhibit No. JBC-1, entitled Tampa Electric's 2018
2 Hedging Activity True-up, was prepared under my direction
3 and supervision. This report describes the company's risk
4 management activities and results for the calendar year
5 2018.

6
7 Q. What is the source of the data you present in your
8 testimony in this proceeding?

9
10 A. Unless otherwise indicated, the source of the data is the
11 books and records of Tampa Electric. The books and records
12 are kept in the regular course of business in accordance
13 with generally accepted accounting principles and
14 practices, and provisions of the Uniform System of
15 Accounts as prescribed by this Commission.

16
17 **Natural Gas Financial Hedging**

18 Q. Please describe the natural gas financial hedging
19 moratorium that began in 2016 and its effects on 2018 risk
20 management activities.

21
22 A. On October 24, 2016, electric investor-owned utilities
23 DEF, Gulf and Tampa Electric, collectively the IOUs,
24 Office of Public Counsel, the Florida Industrial Power
25 Users Group, and the Florida Retail Federation jointly

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *filing 07/19/17*

LJH

1 entered into a Stipulation and Agreement ("Agreement").
2 Under the terms of the Agreement, the IOUs agreed to put
3 in place a 100 percent moratorium on any new hedges,
4 effective immediately upon the Commission's approval of
5 the Agreement, with that moratorium extending through
6 calendar year 2017. The Agreement was approved by the
7 Commission on December 5, 2016, with the issuance of Order
8 No. PSC-2016-0547-FOF-EI. By Commission vote memorialized
9 in Order No. PSC-2017-0134-PCO-EI issued April 13, 2017,
10 Tampa Electric was not required to file a 2018 Risk
11 Management Plan, effectively extending the hedging
12 moratorium.

13
14 Tampa Electric prudently followed its 2016 Risk
15 Management Plan, Commission Order No. PSC-2016-0547-FOF-
16 EI, and Commission Order No. PSC-2017-0134-PCO-EI in
17 utilizing financial hedges already in place prior to the
18 moratorium to mitigate volatility of natural gas prices
19 during the period January 2018 through December 2018.

20
21 Q. What does Tampa Electric plan to do when the hedging
22 moratorium ends?

23
24 A. In accordance with the company's 2017 Amended and Restated
25 Stipulation and Settlement Agreement approved by

600

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *filing 07/19 IT* *WH*

1 Commission Order No. PSC-2017-0456-S-EI, issued on
2 November 27, 2017 in Docket No. 20170210-EI, Tampa
3 Electric will not enter into any new natural gas financial
4 hedging contracts for fuel from January 1, 2018 through
5 December 31, 2022.

6
7 Q. Did Tampa Electric have any natural gas financial hedging
8 contracts that were entered prior to the start of the
9 hedging moratorium and effective during 2018?

10
11 A. Yes. Tampa Electric has reported on the natural gas
12 financial hedging contracts entered prior to Commission
13 approval of the hedging moratorium, and the company has
14 not entered any new financial hedging contracts since the
15 moratorium began. All such hedging contracts have been
16 settled as of the end of November 2018.

17
18 **Risk Management Activities**

19 Q. What were the results of Tampa Electric's risk management
20 activities in 2018?

21
22 A. As outlined in Tampa Electric's 2018 Hedging Activity
23 True-up, filed as an exhibit to this testimony, the
24 company followed a non-speculative risk management
25 strategy to reduce fuel price volatility while

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *filing 07/19 IT*

1 maintaining a reliable supply of fuel. The company's 2018
2 risk management activities include financial hedges
3 established prior to the moratorium. Tampa Electric's
4 2018 natural gas hedging activities resulted in a net
5 settlement loss of approximately \$232,000. These results
6 are due to the market conditions experienced in the past
7 two years as Tampa Electric has not placed any new
8 financial hedges on its natural gas purchases since the
9 moratorium began. The 2018 financial hedges were
10 successful in achieving the risk management plan
11 objective of reducing price volatility while maintaining
12 a reliable fuel supply.

13
14 Q. Does Tampa Electric implement physical hedges for natural
15 gas?

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

25

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *LN*
filing 07/19 IT

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

10

11 Q. Does Tampa Electric use a hedging information system?

12

13 A. Yes, Tampa Electric uses the Allegro System ("Allegro").
14 Allegro supports sound hedging practices with its
15 contract management, separation of duties, credit
16 tracking, transaction limits, deal confirmation, risk
17 exposure analysis and business report generation
18 functions. Allegro tracks all existing financial natural
19 gas hedging transactions, and the system produces risk
20 management reports.

21

22 Q. Did the company use financial hedges for commodities other
23 than natural gas in 2018?

24

25 A. No. Tampa Electric did not use financial hedges for

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *filing 07/19 I*

LX

1 commodities other than natural gas in 2018. Tampa
2 Electric's generation units are fueled primarily by coal
3 and natural gas. The price of coal has historically been
4 stable compared to the prices of oil and natural gas. In
5 addition, there is not an organized, liquid, market for
6 financial hedging instruments for the high-sulfur
7 Illinois Basin coal that Tampa Electric uses at Big Bend
8 Station, its largest coal-fired generation facility.
9 Tampa Electric consumes a small amount of oil; however,
10 its low and erratic usage pattern makes price hedging
11 impractical. Similarly, Tampa Electric did not use
12 financial hedges for wholesale power transactions because
13 a liquid, published market does not exist for power in
14 Florida.

15
16 Q. How does Tampa Electric assure physical supply of other
17 commodities?

18
19 A. Tampa Electric assures sufficient physical supply of coal
20 and oil through supply diversification, inventory
21 sufficiency, and delivery flexibility. For coal, the
22 company enters into a portfolio of contracts with
23 differing terms and various suppliers to obtain the types
24 of coal used in its electric generation system. Through
25 a competitive bid process, supplier diversity and

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2.11

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *Filing 07/19/17*

1 transportation flexibility, Tampa Electric obtains
2 competitive prices with valuable quality and
3 transportation flexibility by selecting from a wide range
4 of purchase options.
5

6 Q. What is the basis for your request to recover the
7 commodity and transaction costs described above?
8

9 A. Tampa Electric requests cost recovery pursuant to
10 Commission Order No. PSC-2002-1484-FOF-EI, in Docket No.
11 20011605-EI:

12 Each investor-owned electric utility shall be
13 authorized to charge/credit to the fuel and
14 purchased power cost recovery clause its
15 non-speculative, prudently-incurred commodity
16 costs and gains and losses associated with
17 financial and/or physical hedging
18 transactions for natural gas, residual oil,
19 and purchased power contracts tied to the
20 price of natural gas.
21

22 Q. Does this conclude your testimony?
23

24 A. Yes, it does.
25

SOURCE

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *filing 07/19 IT*

DOCKET NO. 20190001-EI
2018 HEDGING ACTIVITY TRUE-UP
EXHIBIT NO. _____ (JBC-1)
DOCUMENT NO. 1
PAGE 3 OF 6

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**Tampa Electric
Natural Gas Hedging Activities
January 1, 2018 through December 31, 2018**

	Type of Hedge	Settlement Saving/(Loss)	Hedged Volume (MMBTU)	Consumption (MMBTU)	Percent Hedged	Budget Price	Hedge Price	Settle Price
Jan-18	Swaps	(\$268,000)		8,829,903				\$2.738
Feb-18	Swaps	\$310,180		8,618,729				\$3.631
Mar-18	Swaps	(\$314,780)		9,138,801				\$2.639
Apr-18	Swaps	(\$125,945)		8,326,287				\$2.691
May-18	Swaps	\$15,360		8,901,622				\$2.821
Jun-18	Swaps	(\$600)		11,427,304				\$2.875
Jul-18	Swaps	\$45,440		12,097,762				\$2.996
Aug-18	Swaps	<i>12</i> \$18,990		12,278,919				\$2.822
Sep-18	Swaps	<i>12.1</i> \$14,290		12,514,965				\$2.895
Oct-18	Swaps	<i>12.2</i> \$37,560		11,991,072				\$3.021
Nov-18	Swaps	<i>12.3</i> \$73,250		10,948,303				\$3.185
Dec-18	Swaps	\$0		N/A				N/A
Total		(\$232,235)		115,073,667				

For 2018, the calendar year net position for natural gas hedges was higher than the closing price of natural gas, resulting in settlement loss of \$232,235. Natural gas price volatility increased in 2018 due primarily to reduced drilling caused by lower prices, increased demand from new liquified natural gas facilities, and low natural gas storage levels.

Tampa Electric increased and diversified its natural gas storage capacity between two storage facilities totaling 2,000,000 MMBtu 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 net settlement loss of \$232,235 in 2018; more importantly, Tampa Electric was successful in reducing price uncertainty and maintaining fuel supply reliability for customers through its physical and financial fuel risk management activities.

SOURCE

(PFC)

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
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LN

DOCKET NO. 20190001-EI
2018 HEDGING ACTIVITY TRUE-UP
EXHIBIT NO. _____ (JBC-1)
DOCUMENT NO. 1
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**Tampa Electric
Coal Contract to Market Indicator Price Comparisons**

Supplier	Contract (\$/MMBtu)	Market Indicator (\$/MMBtu)	Difference (\$/MMBtu)	Market Indicator Source	Note
Knight Hawk Coal LLC	[REDACTED]	\$3.39	[REDACTED]	Gen 2014-01 (RFP issued 11/5/13)	1
Alliance Coal LLC	[REDACTED]	\$3.39	[REDACTED]	Gen 2014-01 (RFP issued 11/5/13)	1
Valero Marketing and Supply Company	[REDACTED]	\$3.09	[REDACTED]	Gen 2018-PC (RFP issued 10/17/17)	2
Koch Carbon	[REDACTED]	\$2.89	[REDACTED]	Gen 2018-PC (RFP issued 10/17/17)	3
Trafigura AG Branch Office Stamford	[REDACTED]	\$3.24	[REDACTED]	Sale/Purchase buyback for cost mitigation	4
CMC - Coal Marketing Company LTD.	[REDACTED]	\$3.82	[REDACTED]	Gen-2018-SALS (RFP issued 10.19.17)	1
Western Kentucky Resources	[REDACTED]	\$3.05	[REDACTED]	Gen 2018-02	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. Market indicator price is the average price submitted of all acceptable coal bids.
2. Index based purchase, pricing based on High posting of the Pace Petroleum Coke Index + \$2.00.
3. Index based purchase, pricing based on Avg posting of Pace Petroleum Coke Index + \$3.00.
4. Price reflects the delivered cost of coal including transportation to, and storage for over a year at, a different terminal on the lower Mississippi at both UBT and Big Bend.

[REDACTED]

➤ 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, Transco, Zone 4, 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.

SOURCE _____



7.14

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *filing 07/19 IT*

DOCKET NO. 20190001-EI
2018 HEDGING ACTIVITY TRUE-UP
EXHIBIT NO. _____ (JBC-1)
DOCUMENT NO. 1
PAGE 1 OF 6

Tampa Electric 2018 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 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.

2018 Risk Management Activities

The company's activities in 2018 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 and inventory with the goal of minimizing fuel costs and price risk while maintaining reliability of supply. The company procured its 2018 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 18 percent of the electricity the company generated in 2018.
- **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.

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *filing 07/19 IT*

DOCKET NO. 20190001-EI
2018 HEDGING ACTIVITY TRUE-UP
EXHIBIT NO. _____ (JBC-1)
DOCUMENT NO. 1
PAGE 2 OF 6

> Natural Gas Purchases

In 2018, approximately 82 percent of the electricity Tampa Electric generated was produced using natural gas. Tampa Electric's risk management strategy focuses on supply reliability. The components critical to the success of the natural gas purchasing strategy are as follows:

- Maintaining liquidity by contracting with numerous qualified counterparties;
- 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 Risk Management 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.

As approved by the Commission in prior years' Risk Management Plans, Tampa Electric used financial floating-price-to-fixed-price swaps to hedge natural gas prices for a portion of its expected gas consumption until the hedging moratorium approved by the Commission in Order No. PSC-16-0547-FOF-EI. The company had hedges that were entered prior to the moratorium and settled during 2018. The costs associated with floating-price-to-fixed-price swaps are embedded in the price of the instruments and are included in the fuel commodity costs reported by the company. These hedges are described in the following table.

SOURCE



REDACTED

Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
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Subject: *filing 07/19 IT*

LN

DOCKET NO. 20190001-EI
2018 HEDGING ACTIVITY TRUE-UP
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**Tampa Electric
Natural Gas Hedging Activities
January 1, 2018 through December 31, 2018**

	Type of Hedge	Settlement Saving/(Loss)	Hedged Volume (MMBTU)	Consumption (MMBTU)	Percent Hedged	Budget Price	Hedge Price	Settle Price
Jan-18	Swaps	(\$268,000)		8,829,903				\$2.738
Feb-18	Swaps	\$310,180		8,618,729				\$3.631
Mar-18	Swaps	(\$314,780)		9,138,801				\$2.639
Apr-18	Swaps	(\$125,945)		8,326,287				\$2.691
May-18	Swaps	\$15,360		8,901,622				\$2.821
Jun-18	Swaps	(\$600)		11,427,304				\$2.875
Jul-18	Swaps	\$45,440		12,097,762				\$2.996
Aug-18	Swaps	\$18,990		12,278,919				\$2.822
Sep-18	Swaps	\$14,290		12,514,965				\$2.895
Oct-18	Swaps	\$37,560		11,991,072				\$3.021
Nov-18	Swaps	\$73,250		10,948,303				\$3.185
Dec-18	Swaps	\$0		N/A				N/A
Total		(\$232,235)		115,073,667				

For 2018, the calendar year net position for natural gas hedges was higher than the closing price of natural gas, resulting in settlement loss of \$232,235. Natural gas price volatility increased in 2018 due primarily to reduced drilling caused by lower prices, increased demand from new liquified natural gas facilities, and low natural gas storage levels.

Tampa Electric increased and diversified its natural gas storage capacity between two storage facilities totaling 2,000,000 MMBtu 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 net settlement loss of \$232,235 in 2018; more importantly, Tampa Electric was successful in reducing price uncertainty and maintaining fuel supply reliability for customers through its physical and financial fuel risk management activities.

SOURCE



7.17

Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *Filing 07/19 IT*

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2018 Market Pricing

Tampa Electric provides a comparison of 2018 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 always specific enough to 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 2018 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.

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *filing 07/19/18*

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

Supplier	Contract (\$/MMBtu)	Market Indicator (\$/MMBtu)	Difference (\$/MMBtu)	Market Indicator Source	Note
Knight Hawk Coal LLC	[REDACTED]	\$3.39	[REDACTED]	Gen 2014-01 (RFP issued 11/5/13)	1
Alliance Coal LLC	[REDACTED]	\$3.39	[REDACTED]	Gen 2014-01 (RFP issued 11/5/13)	1
Valero Marketing and Supply Company	[REDACTED]	\$3.09	[REDACTED]	Gen 2018-PC (RFP issued 10/17/17)	2
Koch Carbon	[REDACTED]	\$2.89	[REDACTED]	Gen 2018-PC (RFP issued 10/17/17)	3
Trafigura AG Branch Office Stamford	[REDACTED]	\$3.24	[REDACTED]	Sale/Purchase buyback for cost mitigation	4
CMC - Coal Marketing Company LTD.	[REDACTED]	\$3.82	[REDACTED]	Gen-2018-SALS (RFP issued 10.19.17)	1
Western Kentucky Resources	[REDACTED]	\$3.05	[REDACTED]	Gen 2018-02	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. Market indicator price is the average price submitted of all acceptable coal bids.
2. Index based purchase, pricing based on High posting of the Pace Petroleum Coke Index +\$2.00.
3. Index based purchase, pricing based on Avg posting of Pace Petroleum Coke Index + \$3.00.
4. Price reflects the delivered cost of coal including transportation to, and storage for over a year at, a different terminal on the lower Mississippi at both UBT and Big Bend [REDACTED]

> 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, Transco, Zone 4, 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.

SOURCE



2.19

Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: *filing 09/19 IT*

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- > No. 2 Oil
Tampa Electric purchases No. 2 oil for combustion turbines at Polk Station. 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.

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SOURCE _____



7.20

Unrealized Aug 2018 TEC Swaps by CP.xlsx

Trade	Company	Trade Type	Begin Time	End Time	Quantity	Price	Market Price	MTM Value	Current Asset	Current Liability	LT Asset	LT Liability	Net Current Asset	Net Current Liability	Net LT Asset	Net LT Liability
	TEC	Swap NG						(\$101,480.00)	\$0.00	(\$101,480.00)	\$0.00	\$0.00	\$0.00	(\$101,480.00)	\$0.00	\$0.00
	TEC	Swap NG	8/1/2018	9/15/2018			\$2,8220	(\$18,890.00)	\$0.00	(\$18,890.00)	\$0.00	\$0.00	\$0.00	(\$18,890.00)	\$0.00	\$0.00
115090	TEC	Swap NG	8/1/2018	9/15/2018			\$2,8220	(\$11,400.00)	\$0.00	(\$11,400.00)	\$0.00	\$0.00	\$0.00	(\$11,400.00)	\$0.00	\$0.00
115800	TEC	Swap NG	8/1/2018	9/15/2018			\$2,8220	(\$11,400.00)	\$0.00	(\$11,400.00)	\$0.00	\$0.00	\$0.00	(\$11,400.00)	\$0.00	\$0.00
115831	TEC	Swap NG	8/1/2018	9/15/2018			\$2,8220	(\$7,590.00)	\$0.00	(\$7,590.00)	\$0.00	\$0.00	\$0.00	(\$7,590.00)	\$0.00	\$0.00
115931	TEC	Swap NG	8/1/2018	9/15/2018			\$2,8220	(\$2,490.00)	\$0.00	(\$2,490.00)	\$0.00	\$0.00	\$0.00	(\$2,490.00)	\$0.00	\$0.00
	TEC	Swap NG						(\$33,320.00)	\$0.00	(\$33,320.00)	\$0.00	\$0.00	\$0.00	(\$33,320.00)	\$0.00	\$0.00
	TEC	Swap NG						(\$12,250.00)	\$0.00	(\$12,250.00)	\$0.00	\$0.00	\$0.00	(\$12,250.00)	\$0.00	\$0.00
118128	TEC	Swap NG	11/1/2018	12/31/2018			\$2,8430	(\$36,920.00)	\$0.00	(\$36,920.00)	\$0.00	\$0.80	\$0.80	(\$36,920.00)	\$0.00	\$0.00
	TEC	Swap NG						(\$101,480.00)	\$0.00	(\$101,480.00)	\$0.00	\$0.00	\$0.00	(\$101,480.00)	\$0.00	\$0.00
Total								(\$101,480.00)	\$0.00	(\$101,480.00)	\$0.00	\$0.80	\$0.80	(\$101,480.00)	\$0.00	\$0.00

Groundsc
8/1/2018 12:00:00 AM
Realized
Unrealized
Total

12

Tampa Electric Company
Hedging Activities
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Subject: GL 07/19 JT

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SOURCE

Unrealized Sep 2018 TEC Swaps by CP.xlsx

12.7

Group/dest
8/1/2018 12:00:00 AM
Realized
Unrealized
Total

Trade	Company	Trade Type	Begin Time	End Time	Quantity	Price	Market Price	MTM Value	Current Asset	Current Liability	LT Asset	LT Liability	Net Current Asset	Net Current Liability	Net LT Asset	Net LT Liability
	TEC	Swap NG					\$2 8850	\$25,800.00	\$26,200.00	(\$400.00)	\$0.00	\$0.00	\$25,800.00	\$0.00	\$0.00	\$0.00
116613	TEC	Swap NG	9/1/2018	10/1/2018			\$2 8950	\$8,000.00	\$8,000.00	\$0.00	\$0.00	\$0.00	\$8,000.00	\$0.00	\$0.00	\$0.00
116613	TEC	Swap NG	9/1/2018	10/1/2018			\$2 8950	\$8,000.00	\$8,000.00	\$0.00	\$0.00	\$0.00	\$8,000.00	\$0.00	\$0.00	\$0.00
116614	TEC	Swap NG	9/1/2018	10/1/2018			\$2 8950	\$6,200.00	\$6,200.00	\$0.00	\$0.00	\$0.00	\$6,200.00	\$0.00	\$0.00	\$0.00
116614	TEC	Swap NG	9/1/2018	10/1/2018			\$2 8950	\$6,200.00	\$6,200.00	\$0.00	\$0.00	\$0.00	\$6,200.00	\$0.00	\$0.00	\$0.00
	TEC	Swap NG						\$11,510.00	\$11,910.00	(\$400.00)	\$0.00	\$0.00	\$11,510.00	\$0.00	\$0.00	\$0.00
117445	TEC	Swap NG	10/1/2018	11/1/2018			\$2 9150	\$160.00	\$160.00	\$0.00	\$0.00	\$0.00	\$160.00	\$0.00	\$0.00	\$0.00
118128	TEC	Swap NG	11/1/2018	12/1/2018			\$2 9380	\$11,750.00	\$11,750.00	\$0.00	\$0.00	\$0.00	\$11,750.00	\$0.00	\$0.00	\$0.00
117441	TEC	Swap NG	10/1/2018	11/1/2018			\$2 9150	(\$400.00)	\$0.00	(\$400.00)	\$0.00	\$0.00	(\$400.00)	\$0.00	\$0.00	\$0.00
								\$25,800.00	\$26,200.00	(\$400.00)	\$0.00	\$0.00	\$25,800.00	\$0.00	\$0.00	\$0.00
										\$25,800.00				\$25,800.00		\$0.00
													\$25,800.00			\$25,800.00

W
Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EIACN 2019-070-2-2
Subject: GL 07/19 IT

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SOURCE

Tampa Electric Company
 Hedging Activities
 08/01/2018 - 07/31/2019
 Docket No. 20190001-EI ACN 2019-070-2-2
 Subject: *LL 07/19 IT*

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Document Number	Document type	Reference	Account	Text	Trading partner	Assignment	Profit Center	Cost Center	Order	Posting Date	Amount	Debit/Credit Ind
9200032244	YE		6200030				P01001	F262120		8/1/2018	858,000.00	S
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9200037173	YE		6200030				P01001	F262120		9/4/2018	-579,000.00	H
9200042068	YE		6200030				P01001	F262120		10/1/2018	583,600.00	S
9200042068	YE		6200030				P01001	F262120		10/1/2018	-604,200.00	H
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2201 9200055957	YE		6200030		2201		P01001		12004122	12/31/2018	234,939.64	S

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Tampa Electric Company
 Hedging Activities
 08/01/2018 - 07/31/2019
 Docket No. 20190001-EI ACN 2019-070-2-2
 Subject: *AL 07/19 IT*

Company Code	Document Number	Document Type	Reference	Account	Text	Transf. Assignator	Profile Center	Cost Center	Order	Posting Date	Amount	Debit/Credit
2201	9200037753	VE		6200030		2201	PO1001	7282120		8/31/2018	-18,590.00	H
2201	9200042749	VE		6200030		2201	PO1001	7282120		9/30/2018	14,290.00	S
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Clearing/Depos Items symbol @01142Postledg												
6200030												
108,110.00												
108,110.00												

2.13

125

SOURCE



TAMPA ELECTRIC CO.
 SWAPS - DERIVATIVE NATURAL GAS INVOICES

44

Aug-18 Production Month <Sales>Purchase
 7/27/2018 Nymex Settlement Date

Total Cash Flow Derivatives

Name	ALLEGRO Invoice No.:	Counterparty Invoice No.:	Invoice Due Date	TAMPA ELECTRIC		PEOPLES GAS		TOTAL	
				Cntrl	Amount	Cntrl	Amount	Cntrl	Amount
			08/03/18		\$11,400.00				\$11,400.00
			08/03/18		\$7,590.00		\$2,310.00		\$9,900.00
			TOTAL		\$18,990.00		\$2,310.00		\$21,300.00
ASSETS					\$0.00		\$0.00		\$0.00 Subtotal Receivables
LIABILITIES					\$18,990.00		\$2,310.00		\$21,300.00 Subtotal Payables
					\$0.00		\$0.00		\$21,300.00 TOTAL REALIZED DERIVATIVE
									\$0.00

CHECK TOTALS					
FROM					
ALLEGRO POSITION SUMMARY REPORTS		\$18,990.00		\$2,310.00	\$21,300.00
CK TOTAL	0.0	\$0.00	0.0	\$0.00	\$0.00

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Tampa Electric Company
 Hedging Activities
 08/01/2018 - 07/31/2019
 Docket No. 20190001-EI ACN 2019-070-2-2
 Subject: August Hedging 07/19 ZT

SOURCE

TAMPA ELECTRIC CO.
SWAPS - DERIVATIVE NATURAL GAS INVOICES

44.1

Sep-18 Production Month <Sales>Purchase

8/29/2018 Nymex Settlement Date

Total Cash Flow Derivatives

Name	ALLEGRO Invoice No.:	Counterparty Invoice No.:	Invoice Due Date	TAMPA ELECTRIC		PEOPLES GAS		TOTAL	
				Cntrt	Amount	Cntrt	Amount	Cntrt	Amount
			09/05/18		(\$8,000.00)				(\$8,000.00)
			09/05/18		(\$6,290.00)		(\$1,110.00)		(\$7,400.00)
			TOTAL		(\$14,290.00)		(\$1,110.00)		(\$15,400.00)
			ASSETS		(\$14,290.00)		(\$1,110.00)		(\$15,400.00) Subtotal Receivables
			LIABILITIES		\$0.00		\$0.00		\$0.00 Subtotal Payables
					\$0.00		\$0.00		(\$15,400.00) TOTAL REALIZED DERIVATIVE:
									\$0.00

CHECK TOTALS						
FROM						
ALLEGRO POSITION SUMMARY REPORTS		(\$14,290.00)		(\$1,110.00)		(\$15,400.00)
CL TOTAL	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: Sep Hedging 07/19
ZT

SOURCE _____

TAMPA ELECTRIC CO
SWAPS - DERIVATIVE NATURAL GAS INVOICES

44.2

Oct-18 Production Month <Sales>Purchase
9/26/2018 Nymex Settlement Date
Total Cash Flow Derivatives

Name	ALLEGRO Invoice No.	Counterparty Invoice No.	Invoice Due Date	TAMPA ELECTRIC		PEOPLES GAS		TOTAL	
				Cntrt	Amount	Cntrt	Amount	Cntrt	Amount
			10/03/18		(\$16,960.00)		(\$4,240.00)		(\$21,200.00)
			10/03/18		(\$20,600.00)		\$0.00		(\$20,600.00)
			TOTAL		(\$37,560.00)		(\$4,240.00)		(\$41,800.00)
			ASSETS		(\$37,560.00)		(\$4,240.00)		(\$41,800.00) Subtotal Receivables
			LIABILITIES		\$0.00		\$0.00		\$0.00 Subtotal Payables
					\$0.00		\$0.00		(\$41,800.00) TOTAL REALIZED DERIVATIVE
									\$0.00

CHECK TOTALS						
FROM	Cntrt	Amount	Cntrt	Amount	Cntrt	Amount
ALLEGRO POSITION SUMMARY REPORTS		(\$37,560.00)		(\$4,240.00)		(\$41,800.00)
CX TOTAL	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-ETACN 2019-070-2-2
Subject: *odd Hedging 07/19*
IT

SOURCE

TAMPA ELECTRIC CO.
SWAPS - DERIVATIVE NATURAL GAS INVOICES

44.3

Nov-18 Production Month <Sales>Purchase
10/29/2018 Nymex Settlement Date

Total Cash Flow Derivatives

Name	ALLEGRO Invoice No.	Counterparty Invoice No.	Invoice Due Date	TAMPA ELECTRIC		PEOPLES GAS		TOTAL	
				Cntri	Amount	Cntri	Amount	Cntri	Amount
			11/01/2018		(\$73,250.00)		(\$14,650.00)		(\$87,900.00)
			TOTAL		(\$73,250.00)		(\$14,650.00)		(\$87,900.00)
			ASSETS		12-3 (\$73,250.00)		(\$14,650.00)		(\$87,900.00) Subtotal Receivables
			LIABILITIES		\$0.00		\$0.00		\$0.00 Subtotal Payables
					\$0.00		\$0.00		(\$87,900.00) TOTAL REALIZED DERIVATIVE
									\$0.00

CHECK TOTALS						
FROM						
ALLEGRO POSITION SUMMARY REPORTS		(\$73,250.00)		(\$14,650.00)		(\$87,900.00)
CHK TOTAL	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00

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Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: Nov. Hedging 07/19 #7

SOURCE _____

Tampa Electric Company
 Hedging Audit
 Docket No. 20190001-E1
 Period Ended July 31, 2019
 Control No. 2010-070-2-2

Auditor: Intesar Terkawi
 File Name: Hedging Transactions

LN

IT
 07/19

Transaction Instrument	Transaction Number	Volume A	Market Price B	Settlement Price C	Gain/loss on Hedging Transactions A*(B-C)
August Transactions					
Commodity Swap Transaction		45.17	45.17	45	11,400.00 (A)
Commodity Swap Transaction		46.19	45.19	45	9,900.00 (A)
September Transactions					
Commodity Swap Transaction		45.34	45.34	45	(8,000.00) (A)
Commodity Swap Transaction		45.36	46.36	46	(7,400.00) (A)
October Transactions					
Commodity Swap Transaction		45.48	45.48	45	(21,200.00) (A)
Commodity Swap Transaction		45.50	45.50	45	(20,600.00) (A)
November Transactions					
Commodity Swap Transaction		45.58	45.58	45	(87,900.00) (A)

SOURCE As Referenced

45

**FOR AUDIT CONTROL NO.
2019-070-2-2**

PAGES 45-1 THROUGH 45-58

**ALL INFORMATION
IS REDACTED**

Tampa Electric
 Summary of Natural Gas Hedge Volumes Relative to Actual Consumption
 August, 2018 - November, 2018

56

Month-Year	Target Minimum	Target Maximum	% of Actual Consumption Hedged	Above Maximum? Below Minimum?	Explanation
Aug-18	[REDACTED]	[REDACTED]	[REDACTED]	Yes	Natural gas hedging suspended at end of 2016.
Sep-18	[REDACTED]	[REDACTED]	[REDACTED]	Yes	Natural gas hedging suspended at end of 2016.
Oct-18	[REDACTED]	[REDACTED]	[REDACTED]	Yes	Natural gas hedging suspended at end of 2016.
Nov-18	[REDACTED]	[REDACTED]	[REDACTED]	Yes	Natural gas hedging suspended at end of 2016.


 Tampa Electric Company
 Hedging Activities
 08/01/2018 - 07/31/2019
 Docket No. 20190001-EI/ACN 2019-070-2-2
 Subject: *Relative Actual Consumption*
 07/19/18

SOURCE 

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- Developing and executing transacting strategies that are consistent with the strategies, limits and products approved by the RAC;
- Proposing strategies and market risk trading limits for RAC approval (following input from the DIRO);
- Assuring that the operations group and systems infrastructure supports the volume and complexity of transactions;
- Developing a process for identifying new products, initiating and managing the review of new products and presenting new products for RAC approval;
- Supervising transactors and all activity;
- Managing and reviewing overall transacting portfolio and risk profile as well as ensuring and verifying that hedges are appropriate and well maintained;
- Enforcing market risk limits and observing credit risk policies;
- Assuring that transactors understand the risk exposures of transactions and understand the risk policies, procedures, and limits; and
- Assuring understanding of all applicable regulatory issues.

Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: front office 09/19 IT

[REDACTED]





2.6. Middle Office

The Middle Office is a TECO Energy corporate function reporting through the DIRO. It consists of three main areas: market risk management, credit risk management and contract management/compliance. The Middle Office will have the following responsibilities:

- Ensure the proper recording of Front Office transactions;
- Negotiate, administer and maintain enabling agreements with counterparties;
- Exchange written and/or verbal confirmations with counterparties;
- Monitor the aging of confirmations;
- Source forward curves for portfolio valuation as needed
- Perform end-of-period portfolio valuation;
- Perform market and credit risk measurement;
- Review counterparty credit and establish appropriate credit limits;
- Determine mark-to-market valuation adjustments;
- Ensure awareness of pertinent regulatory provisions/standards and monitor transactional compliance; and
- Developing appropriate control procedures to monitor compliance with Energy and Credit risk policies.

Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019 LY
Docket No. 20190001-EI ACN 2019-070-2-2
Subject: Middle office 07/19 IT

The activities of the Middle Office do not reduce the Front Office’s primary responsibility for accurately assessing and managing the risk associated with their business profile. A strong segregation of duties must exist between Front and Middle Office activities.

2.7. Back Office

The Back Office function is responsible for financial and accounting activities relating to the transaction process independent of the Front Office. The Back Office will have the following responsibilities:

- Track and process transactions;
- Maintain customer information;
- Perform P&L reconciliation;
- Prepare customer billings;
- Issue payment receipt/instructions; and
- Support or perform transaction settlements.

Tampa Electric Company
Hedging Activities
08/01/2018 - 07/31/2019
Docket No. 20190001-EI ACN 2019-070-2-2
Subject:

SOURCE

