## 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 FILED OCT 05, 2015 DOCUMENT NO. 06265-15 **FPSC - COMMISSION CLERK** 

October 5, 2015

## HAND DELIVERED

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

## REDACTED

Fuel and Purchased Power Cost Recovery Clause with Generating Performance Re: Incentive Factor: FPSC Docket No. 150001-EI

Dear Ms. Stauffer:

We submit on behalf of Tampa Electric Company one redacted version of Staff's Audit Work Papers pursuant to Audit Control No. 15-051-2-2. 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,

Jan OBer y



JDB/pp Enclosure

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

COMMISSIONERS: ART GRAHAM, CHAIRMAN LISA POLAK EDGAR RONALD A. BRISÉ JULIE I. BROWN JIMMY PATRONIS

## STATE OF FLORIDA



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

## Public Service Commission

September 14, 2015

RE: Hedging Activities Audit Docket No. 150001-EI/ACN 15-051-2-2

Dear Sloan Lewis,

We have completed our field work in the above-referenced audit. Included with this letter are copies of the audit workpapers which the Commission is maintaining in a Temporary Confidential Status and a listing of these workpapers. Please sign and date a copy of this letter indicating that you have received these copies.

The Utility must file a request for Confidential Classification according to Rule 25-22.006, F.A.C. in order to maintain this confidentiality. This request must be filed with the Commission within twenty-one days from today or these workpapers will become public documents.

Sincerely,

Intesar Terkawi Audit Manager

Idienne Bein Received By:

Attachments

Copy: Audit File

Internet E-mail: contact@psc.state.fl.us

## Index of Confidential Workpapers Tampa Electric Company Docket No. 15001-EI/ACN 15-051-2-2 Hedging Activities

Item No.	Description	Workpaper No.	No. of Pages
1	Filing	2	14
2	GL	12	11
3	Market to Market Report	44	16
4	Invoices	45	88
5	Accounting Treatment	46	2
6	Budgeted and Actual	57	10
7	Seperation of Duties	58	3

**Total Pages** 

Company I Docket No Audit Purp	Name: : :ose:	TECO 150001-El Hedging Activities								
Date:	9/14/2015			Confidential Docum	ent Log					
item No.	Document Description			Receipt of Mate	rials			Disposition	of Materials	
	Description	No. of Pages	Document Request #	Received From	Received By	Date Received	Returned to	Date Returned	Received By	Work Paper Locator
1 2	Document Request 1,2,48,9 Filing	CD 2	1,2,4,8,9 2	Joe Castiglioni Joe Castiglioni	intesar Terkawi Intesar Terkawi	7/22/2015 7/22/2015	Joe Castiglioni Joe Castiglioni	9-14-15 L	JLC	All 2

TAMPA ELECTRIC BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION DOCKET NO. 150001-EI IN RE: FUEL & PURCHASED POWER COST RECOVERY AND CAPACITY COST RECOVERY Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2 Subject: oP 2014 HEDGING ACTIVITY TRUE-UP ۱ TESTIMONY AND EXHIBIT CONFIDENTIAL J. BRENT CALDWELL FILED: APRIL 7, 2015 SOURCE.

Tampa Ele	ctric Company		
Hedging A	ctivities		
08/01/201 Docket N	. 150001-EI ACN 1	5-051-2-2	load.
Subject:	Ciling	001	SI
		)	+-1

TAMPA ELECTRIC COMPANY DOCKET NO. 150001-EI FILED: 4/7/2015

		11
1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2	1/2	PREPARED DIRECT TESTIMONY
3		OF
4		J. BRENT CALDWELL
5		CUNFILIENTIAL
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's degree in Electrical Engineering
18		from Georgia Institute of Technology in 1985 and a
19		Master of Science degree in Electrical Engineering in
20		1988 from the University of South Florida. I have over
21		20 years of utility experience with an emphasis in state
22		and federal regulatory matters, fuel procurement and
23		transportation, fuel logistics and cost reporting, and
24	-	business systems analysis. In October 2010, I assumed
25	(6)	responsibility for long term fuel supply planning and

SOURCE\_

1

2.1

	1	Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-ELACN 15-051-2-2 Subject: Filing OP/L5 TT
	1	procurement for Tampa Electric's generating stations.
	2	
	3 Q.	Have you previously testified before the Florida Public
3	4	Service Commission ("FPSC" or "Commission")?
	5	
)	6 A.	Yes. I have submitted written testimony in the annual
	7	fuel docket since 2011, and I testified before the
	8	Commission in Docket No. 120234-EI regarding the
	9	company's fuel procurement for the Polk 2-5 Combined
1	0	Cycle Conversion project
1	1	CUNFIDENTIAL
11	2 Q.	Please state the purpose of your testimony.
1	3	
14	4 A.	The purpose of my testimony is to present, for the
1	5	Commission's review, information regarding the 2014
10	6	results of Tampa Electric's risk management activities,
1	7	as required by the terms of the stipulation entered into
10	8	by the parties to Docket No. 011605-EI and approved by
19	9	the Commission in Order No. PSC-02-1484-FOF-EI.
20	0	
2	1 Q.	Do you wish to sponsor an exhibit in support of your
22	2	testimony?
23	3	
24	4 A.	Yes. Exhibit No (JBC-1), entitled Tampa Electric's
SOURCE 25	5	2014 Hedging Activity True-up, was prepared under my
000110-2	l	2

2.2

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-ELACN 15-051-2-2 Subject: Filing OP/15 It This c

	1	
1		direction and supervision. This report explains the
2		company's risk management activities and results for the
3		calendar year 2014.
4		
5	Q.	What is the source of the data you present in your
6		testimony in this proceeding?
7		
В	A.	Unless otherwise indicated, the source of the data is
9		the books and records of Tampa Electric. The books and
10		records are kept in the regular course of business in
11		accordance with generally accepted accounting principles
12		and practices, and provisions of the Uniform System of
13		Accounts as prescribed by this Commission.
14		
15	Q.	What were the results of Tampa Electric's risk
16		management activities in 2014?
17		CONFIDENTIAL
. 18	A.	As outlined in Tampa Electric's 2014 Hedging Activity
19		True-up, filed as an exhibit to this testimony, the
20		company follows a non-speculative risk management
21		strategy to reduce fuel price volatility while
22		maintaining a reliable supply of fuel. In particular,
23		Tampa Electric established a financial hedging program
24	2 meres	to limit customers' exposure to spikes in the price of
COURCE 25		natural gas. Over time, this program has been enhanced
300101		

2.3

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2 Subject: Filing 08/15 It

terms to enhance the company's supply reliability and flexibility to cost-effectively meet changing operational needs.

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

CONFIDENTIAL

1

2

3

4

5

6

7

8

9

10

11

12

13

15	Q. Does Tampa Electric use a hedging information system?
16	I I
17	A. Yes, until recently, Tampa Electric has used Sungard's
18	Nucleus Risk Management System ("Nucleus"). In 2013,
19	Tampa Electric initiated a project to replace Nucleus
20	with Allegro. The natural gas portion of the Allegro
21	project replaced Nucleus for all natural gas financial
22	and physical transactions effective November 1, 2014.
23	Allegro supports sound hedging practices with its
24	contract management, separation of duties, credit
SOURCE	tracking, transaction limits, deal confirmation, risk

5

2.5

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2 Subject: 081 ISTT 1 exposure analysis and business report generation 2 functions. The Allegro system records all financial 3 natural hedging transactions, gas and the system calculates risk management reports. 4 5 Did the company use financial hedges for commodities Q. 6 7 other than natural gas in 2014? CONFIDENTIAL 8 9 Α. No. Tampa Electric did not use financial hedges for commodities other than natural gas in 2014. 10 11 Tampa Electric's generation comprises mostly coal and 12 The price of coal has historically been natural gas. 13 stable compared to the prices of oil and natural gas. 14 In addition, there is not an organized, nor a liquid, 15 market for financial hedging instruments for the high-16 sulfur Illinois Basin coal that Tampa Electric uses at 17 Big Bend Station, its largest coal-fired generation 18 facility. 19 20 Tampa Electric consumes a small amount of oil; however, 21 22 its low and erratic usage pattern makes price hedging impractical. 23 24 Similarly, Tampa Electric did not use financial hedges 25 6

SOURCE

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No, 150001-EI ACN 15-051-2-2 Subject: Filing OP/15 Ft

for wholesale power transactions because 1 a liquid, published market does not exist for power in Florida. 2 3 How does Tampa Electric assure physical supply of other 4 Q. 5 commodities? 6 A. Tampa Electric assures sufficient physical supply of 7 coal and oil through supply diversification, inventory 8 sufficiency, and delivery flexibility. For coal, the 9 company enters into a portfolio of contracts with 10 differing terms and various suppliers to obtain the 11 types of coal used in its electric generation system. 12 Through a competitive bid process, supplier diversity 13 and transportation flexibility, Tampa Electric is able 14 to get competitive prices with valuable quality and 15 transportation flexibility by selecting from a wide 16 range of purchase options. . 17 CUNFILIENTIAL 18 For oil, Tampa Electric fills its oil tanks prior to 19 entering hurricane season to reduce exposure to supply 20 or price issues that may arise during hurricane season. 21 Competition for potentially limited oil supplies and oil 22 23 transportation during a crisis emphasizes the need for maintaining sufficient inventory. 24 25 SOURCE

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2 Subject: Giling OP/15 It

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	1
17	Q. Does this conclude your testimony?
18	
19	A. Yes, it does.
20	
21	CONFIDENTIAL
22	
23	
24	
SOURCE	
	8 2.8

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-ELACN 15-051-2-2 Subject: Filing 08/15 It DOCKET NO. 150001-EI 2014 HEDGING ACTIVITY TRUE-UP EXHIBIT NO.\_\_\_\_\_ (JBC-1) DOCUMENT NO. 1 PAGE 1 OF 6

## Tampa Electric 2014 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.

CONFIDENTIAL

## 2014 Risk Management Activities

The company's activities in 2014 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 2014 coal needs from suppliers with known, established pricing. Thus, the l 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 62 percent of the electricity the company generated in 2014.

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.

SOURCE\_\_\_\_\_

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No 150001-EI ACN 15-051-2-2 Subject: Filing 08/15 It DOCKET NO. 150001-EI 2014 HEDGING ACTIVITY TRUE-UP EXHIBIT NO.\_\_\_\_\_ (JBC-1) DOCUMENT NO. 1 PAGE 2 OF 6

## Natural Gas Purchases

Þ

In 2014, approximately 38 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:

LLI

- 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, I Tampa Electric continued to use financial instruments to hedge the price of a portion of the 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.

## CONFIDENTIAL

ł

2.10



August 2014

September 2014

October 2014

November 2014

December 2014

Swap

Swap

Swap

Swap

Swap 12-4

(\$382,010)

12.2 \$43,200 44

12-3(\$906,615)44

\$347,750 44

\$15,615,785

12- (\$770,010)

# CONFIDENTIAL

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2 Subject: 02/15

\$3.81

\$3.96

\$3.98

\$3.73

\$4.28

7.11

**Tampa Electric Company** Natural Gas Hedging Activities January 1, 2014 through December 31, 2014

		1			トレ	1		
Contract	Type of Hedge	Realized Gain/(Loss)	Hedged Volume (MMBtu)	Consumption (MMBtu)	Percent Hedged	Budget Price	Hedge Price	Settle Price
January 2014	Swap	\$1,067,285		3,388,832	No. of Concession, Name			\$4.41
February 2014	Swap	\$4,942,700		3,157,828			14-15	\$5.56
March 2014	Swap	\$2,232,670	ALC: NOT	4,603,963				\$4.86
April 2014	Swap	\$1,791,450		4,973,592				\$4.58
May 2014	Swap	\$2,668,620		5,530,263				\$4.80
June 2014	Swap	\$2,677,190		5,480,316				\$4.62
July 2014	Swap	\$1,903,555		5,467,277				\$4.40
	1	1 1 2 1 1 1		<ul> <li>All Property Streams</li> </ul>				

5,971,293

5,411,089

4,697,477

2,776,256

2,638,561

54,096,745

Consistent with Tampa Electric's non-speculative risk management plan objective, Tampa Electric's natural gas hedging plan provided price stability and certainty during 2014. For 2014, the calendar year net position for natural gas hedges was slightly below the closing price of natural gas, resulting in a mark-tomarket net gain of \$15.6 million. The closing price was above the fixed hedge price primarily due to an increase in demand for natural gas following the colder than normal weather for the winter of 2013/2014.

Tampa Electric maintains natural gas storage capacity of 1,500,000 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 gain of approximately \$15.6 million in 2014; more importantly, Tampa Electric was

SOURCE\_

t

DOCKET NO. 150001-EI 2014 HEDGING ACTIVITY TRUE-UP EXHIBIT NO.\_\_\_\_ (JBC-1) DOCUMENT NO. 1 PAGE 4 OF 6

successful in reducing price uncertainty and maintaining fuel supply reliability for customers for both its physical and financial hedges.

#### 2014 Market Pricing

Tampa Electric provides a comparison of 2014 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 2014 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 Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2 0 8/1s Subject: ing TT

# CONFIDENTIAL

SOURCE\_

1

ł

2.12

## REDACTED

100

Tampa Electric Natural Gas Hedging Activities January 1, 2015 through July 31, 2015

	Type of Hedge,	Mark-to-Market Saving/(Loss)	Hedged Volume (MMBTU)	Consumption (MMBTU)	Percent Hedged	Budget Price	Hedge Price	Settle Price
Jan-15	Swaps	(\$2,576,655) 7	5	4,459,415				\$3.19
Feb-15	Swaps 2	-6 (\$3,450,145) 4	1	4,073,535	£			\$2.87
Mar-15	Swaps	m (\$3,338,845) V	1	6,272,889	No.			\$2.89
Apr-15	Swapsi	\$ (\$3,428,830)	2	5,842,268				\$2.59
May-15	Swaps	9 (\$4,357,580) 44		7,263,430				\$2.52
Jun-15	Swaps(	.19\$3,356,285)44	5	8,097,636				\$2.82
Jul-15	Swaps *	(1.6(\$3,627,895) yu		8,092,380				\$2.77
Total		(\$24,136,235)		44,101,553				

1

2.13

#### **Tampa Electric Company** Summary of Natural Gas Expenses For the Month Ending August 31,2014

「「「「「「「」」」、「「「」」、「「」」、「」」、「」」、「」」、「」」、「	Total	Unit1	Unit 1 - Auxil lary	Unit 2m	Unit 3	Unit 4	Unit S
Mmbtu's	437,309	313,257	4,239	72,423	15,048	19,415	31,927
MCFS	445,592	305,915	4,140	70,726	15,672	18,950	31,179
N of Total	100.0%	58.5%	0.9%	15.8%	3.5%	4.2%	7,00
Purchases	1,999,539.72	1,369,686.17	18,534.62	316,662.62	70,158.34	84,890.22	139,597.75
ale	(45,029.18)	(30,845.02)	(417.40)	(7,131.17)	(1,580.18)	(1,911.71)	(3,143.70
mbalance - Pipeline	9,828.36	6,732.43	91.10	1,556.50	344.90	417.26	685.17
nventory - Current Month	(395,693.90)	(271,050.61)	(3,667.86)	(62,665.15)	(13,885.79)	(16,799.14)	(27,625.35
inventory - Prior Month	114,693.95	78,565.44	1,063.15	18,163.82	4,024.87	4,869.32	8,007.35
Reservation Cost	553,711.60	379,292.85	5,132.60	87,690.06	19,430.98	23,507.76	38,657.35
Usage Cost	(5,770.58)	(3,952.85)	(53.49)	(913.87)	(202.50)	(244.99)	(402.88
Storage Cost	22,010.46	15,077.18	204.02	3,485.75	772.40	934.45	1,536.56
Realized Hedging	(1) 29,274.98	20,053.38	271.36	4,636.21	1,027.32	1,242.87	2,043.84
Fosal Feer	2,282,565.81	1,563,558.97	23,158.10	361,444.77	80,100.34	1. HE	A (154,357.19
<u>Addi Accrual Adjustmenta</u> Accrual Adjustment - June 2014	(0.86)	(0.41)	(0.02)	(0.09)	(6.13)	(0.01)	(0.20
Total Poll, Natural Gas Expense	2,282,564.55	1,563,558.56	21,158.08	361,484.68	80,100.23	96,906.03	159,336.99
\$/Mmbtu's	\$4.99						

BAYSIDE

3,107,402

3,034,572

13,632,293.02

56.3%

Unit 3

10,141

9,903

0.2%

44,488.96

Unit 4

1,912

1,867

0.0%

8,388.02

(188.85)

(1,654.39)

1,018.40

2,331.84

- 10,126.07

(24.09)

91.89 122.22

(0.02)

10,125.05

41.03

Unit 2

243*38. White the Million of the	Total -
Mmbtu's	
MCF'S	
	De 1157 - 44
Purchases	
Transportation Cost	,
Total Feen	ROMONIAL
Add: Accrual Adjustments	
-	3
Taking CTIT BEAR SHALL FIRST FIRST FRAME	

8IG BEND	
「「「「「「「」」」、「「「」」、「「」」、「」」、「」」、「」」、「」」、「	BB CT4
Mmbtu's	8,094
MCF'S	7,904
% of Total	0.1%
Purchases	35,507.82
Sale	(799.46)
Imbalance - Pipeline	173.69
Inventory - Current Month	
inventory - Prior Month	
Reservation Cost	9,871.06
Usage Cost	(101.99)
Storage Cost	388.99
Realized Hedging	517.37
Total Fees:	45,557,48/
Add: Accrual Adjustments Accrual Adj Jun 2014	(0.06)
A SACING MARINE	45,557.42
\$/Mrabtu's	\$5.63

1		(\$45,053.14)	(234,860.51)	(306,928.39)	(1,001.66)	
2	iance - Pipeline	118,422.22	51,027.53	66,685.50	217.63	
21	tory - Current Month	(4,767,726.91)	(2,057,406.84)	(2,688,729.09)	(8,774.66)	
(T-	tory - Prior Month	2,934,888.11	1,266,485.89	1,655,111.37	5,401.45	
311	vation Cost	6,729,930.60	2,899,892.70	3,789,734.59	12,367.79	
stat	+ Cost	(69,529.82)	(29,960.04)	(39,153.38)	(127.78)	
in the second se	re Cost	265,204.59	114,275.30	149,341.07	487.37	
0	ed Hedging	(1) 352,735.02	151,991.72	198,630.89	648.23	
5 5	Feet State State State	29,227,527,99	12,592,812.35	16,456,985.58	53,707.33	
DIS DACNI	<u>scorial Adjustments</u> Accruel Adjustment - June 2014	(16,41)	(6.61)	(9.58)	(0.07)	
F-10	leyside Natural Gas Expense	29 227 311.54	12,592,825,74	15,456,976.00	53,707.26	
28_1	\$/Mmbtis's	\$5.30				
2014 - 0 11 No. 15	entory Volume (in MMBTU's) ACTOR	1,308,159 1,024	CM E	nding Inventory	5,163,420.81	
ie ke	wentory (In MCF's)	1,277,499	PM E	iding Inventory	(3,049,582,06)	

Unit1

2,377,774

2,322,045

10,431,386.70

43.1%

Total

24,208,657.32

5,835,481.00

(740,756) 6,372,224.40

5,510,129

5,380,985

100.0%

		8
any	015	I A(
luno	31/2	I-100
Hic (	110-	1500
Elect	014 OI	No.
npa	ulgin 01/2	cket

Tampa Hedgir 08/01/. Docket Subjec

Mmbtu's

MCF'S

18585

Ital MCF's

A Ending Inventory (MCF3) wichases (Units)

MMatu's	5,967,438
POLX	5%
BAYSIDE	92%

TOTALALL	GAS
MMBTU'S	5,975,531.80
MOFS	5,835,481.00

(3,049,582.06) 33,623,934.88 **PM Ending Inventory** Total Purchases (\$) S

Contraction and a point	DULLACI - Contraction
Total Burn Dollars	31,510,076.13
Bayside Additives	6.00
Adj. Burn Dollars	31,510,076.13

CHECKTO NO ES	THAT STREET, SAL
NG Expense (w/o) Ad].	31,510,093.40
less: PM Ending Inv.	(3,049,582.06)
VPEM-Baygas Storage Pymt	42,750.00
To: NG Accrual	28,503,251.34
Fer: NG Estimate	28,460,511.34
ck	42,750.00
	Vielocro No Es NG Expanse (w/o) AdJ, less: PM Ending Inv. VPEM-Bargas Storage Pynt To: NG Accrual Per: NG Estimate ck

Unit 5

4,668

4,559

\_0.1%

20,478.70

(451.07)

100.18

(4,039.06)

2,486.34

5,693.01

(58.82)

224.34

298.39

(0.01)

24,722.00

24,722.01

Unit 6

8,232

8,039 0.1%

36,114.10

(7,122.87)

4,384.66

10,039.61

(103.72)

395.63

526.20

(0.05)

43,597.17

43,597.12

(813.10)

176.66

# D(382,010)

SOURCE\_

2

Prepared by:

Date:

Reviewed by \_\_\_\_ Date:

#### **Tampa Electric Company** Summary of Natural Gas Expenses For the Month Ending September 30,2014

		and the second second second	20(K.			the second s		State of the second	
「ないないない」というないのであるというとう	Total	Unit 1	Unit 1 - Auxiliary	Unit 2	Unit 3	Unit 4	UNIS	Table Same State of Charty	2435
Mmbtu's	373,941	214,490	5,855	88,151	42,748	105	22,552	Mimbre's	-
MCFS	364,466	209,055	5,745	85,917	41,665	102	21,981	MOPS	
% of Total	100.0%	57.4%	1.6%	23.5%	11.4%	6.0%	6.0%		a na
Purchases	1.571,946.62	901,657.83	24,780.98	370,562.91	179,701.01	441.39	94,802.50	Purchases	
Sale	(49,953.84)	[28,653.18]	(787.50)	(11,775.87)	(5,710.60)	(14.03)	(3,012.66)	Transportation Cost	
Imbalance - Pipeline	14,617.59	8,384.55	230.44	3,445.88	1,671.05	4.10	881.57		
Inventory - Current Month	(312,131.26)	(179,036.36)	(4,920.60)	[73,580.28]	(35,682.07)	(87.64)	(18,824.31)		
Inventory - Prior Month	395,693.90	226,967.31	6,237.92	93,278.92	45,234.74	111.11	23,863.90	1	
Reservation Cost	483,041.68	277,069.40	7,614.92	113,869.85	55,220.12	135.63	29,131.76		
Usage Cost	(4,702.17)	(2,697.13)	(74.13)	(1,108.47)	(537.54)	(3.32)	(283.58)		
Storage Cost	19,563.15	11,221.29	308.40	4,511.72	2,236.45	5.49	1,179.84		
Realized Hedging	( ) 53,254.01	30,546.14	839.52	12,553.84	5,087.87	14.95	3,211.69		
Total Fees:	2,171,129.54	1,245,419.85	34,229.95	511,858.50	248,220.99	609,68	130,950.71	Total Fees: colab.	0.02527
Addi Ascruel Adivitmenta Accruel Adjustment - July 2014	(638.98)	(96.93)	(9.74)	(134.92)	(72.64)	(111.30)	(213.45)	Addi Aconvel Adiustmente	
Total Polk Natural Gas Expense	2,170,69076	1,145,3(2.92	34,220,21	511,723.58	248, 148.35	498.38	130,737.26	Total COT Natural Gas Espanse-	Mar .
\$/Mmbtu's	\$5.80							\$/Mmbh	w's

and the second s			BAYSIDE				
1221、2211、125日本の「日本の」である	Total	Unit 1	Unit 2	Unit B	Unit 4 Acres 1	Unit S	Unit 6
	5,032,944	2,450,724	2,523,816	13,719	16,685	2,481	25,519
	4,905,403	2,388,620	2,459,860	13,371	16,262	2,418	24,872
A REAL PORT OF THE PERSON AND A DESCRIPTION	100.0%	48.6%	\$0.0%	0.3%	0,3%	0.0%	0.59
es	21,363,369.20	10,381,772.01	10,691,404.79	58,116.51	70,681.10	10,510.03	108,103.74
4	(678,661.16)	(329,803.10)	(339,639.37)	(1,846.22)	(2,245.36)	(333.68)	[3,434.19]
ce - Pipeline	196,740.96	95,608.51	98,460.00	535.21	650.92	96.79	995.56
y - Current Month	(4,201,034.77)	(2,045,637.05)	(2,106,647,47)	(11,451.35)	{13,927.09}	(2,020.91)	(21,300.90)
y - Prior Month	4,767,726.91	2,321,580.13	2,390,820.45	12,996.06	15,805.76	2,350.26	24,174.25
don Cost	6,530,453.87	3,173,548.26	3,268,198.25	17,765.33	21,606.13	1,212.75	33,045.65
fac	(63,287.43)	(30,755.25)	(31,672.51)	(172.17)	(209.39)	(31.14)	(320.25)
Cost	263,304.22	127,955.68	131,771.91	716.29	871.15	129.54	1,332.38
Hedging	716,755.99	348,315.72	358,704.11	1,949,85	2,371.40	352.62	3.626.96
an transfer of the second states	28,895,387.79	Sec 14,042,584.91	14,461,400.15	78,509.51	95,604.62	14,215.06	145,223.20
zzuai Adjustments Accrual Adjustment - July 2014	(16,350.83)	(6,963.31)	(9,149.05)	(64.39)	(28.35)	(31.78)	(45.90)
yside Natural Gas Expense	28,879,815.96	14,035,621.60	14,452,251.11	78,545,12	95.576.27	14.194.28	=145,177.30
\$/Menhtu's	\$5.74						

A A A A A A A A A A A A A A A A A A A	88 CT 4
Menbtu's	10,099
MOPS	9,843
X of Total	Se
Purchases	42,781.02
Sale	(1,359.04)
imbalance - Pipeline	393.97
Inventory - Current Month	
Inventory - Prior Month	
Reservation Cost	13,077.50
Usage Cost	(126.72)
Storage Cost	\$27.27
Realized Hedging	1,435.33
Total Fees:	56,729.35
Add: Accrual Adjustments Accrual Adjustment - July 2014	(68.05)
a tra	+56,661.28
& Adventure of	** **

BIG BEND

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-05 Subject:

Prepared by: \_

Date:

#### UNIT DO'ERSE CHECK HOURE ntory Volume (in MMBTU's) 1,262,378 CTD8 1.026 . NG inventory (In MOF's) 1,230,388 5,279,712.00 add: Total MCF's less: PM Ending Inventory (MCF's) (1,277,499) 5,232,600.89 Total Purchases (Units)

ALL SED PHOTALPO	
MMBTU'S	5,406,885
POLK	7%
BAYSIDE	53%

107	TRAILER CHARGE STREET,
MMETU'S	5,416,983.90
MCF'S	5,279,712.00

CM Ending Inventory 4.513 166.03 Total Burn Dollars 31,049,707.66 PM Ending Inventory (5,163,420.81) Total Purchases (S) 30,399,452.88 5

CARLEN ADI, BURN	DOLLARS
Total Burn Dollars	31,049,707.56
Bayside Additives	0.00
Adj. Burn Dollars	31,049,707.66

Reviewed by:

Date:

	And second second second second	
	NG Expense (w/o) Adl	31.066.697.47
	less: PM Ending Inv.	(5,163,420,81)
	VPEM-Baygas Storage Pymt	42,750.00
	To: NG Accruai	25,946,025,56
$\leq$	Per: NG Estimate	25,903,276.65
	a 1	42,750.017
~		
$\square$		
1.1		
and		
6		
$\square$		
~		
$\square$		

₹()=7701010.09 2.11

J

Proble Total

-----

1.20

\$0.00

#### **Tampa Electric Company** Summary of Natural Gas Expenses For the Month Ending October 31,2014

HARD THE PARTY OF			23(1				
and the second second second	Timal	Unit1		Uhiti 2	Unit 3	Unit 4	Unit 5
Mmbtu's	261,193	78,478	1,751	34,374	18,507	43,428	84,655
MCFS	255,322	76,714	1,712	33,601	18,091	42,452	82,752
% of Total	100,075	30.0%	0.7%	13.2%	7.1%	16,65	582.49
Purchases	1,149,696.65	345,437.64	7,707.40	151,304 49	81,462.50	191,157.60	372,627.02
Sale	(102,740.85)	(30,869.50)	(686.76)	(13,521.09)	(7,279.77)	(17,082.50)	(33,299.23
Imbalance - Pipeline	(10,535.83)	(3,165.59)	(70.63)	(1,386.56)	(746.52)	(1,751.77)	(3,414.76
Inventory - Current Month	(215,270.52)	(54,680.14)	(1,443.14)	(28, 330.43)	(15,253.13)	(35,792.57)	(69,771.11
Inventory - Prior Month	312,131.26	93,782.90	2,092.48	41,077.67	22,116.26	51,897.40	101,164.55
Reservation Cost	353,792.28	106,300.36	2,371.77	46,560.42	25,068.18	58,824.28	114,667.27
Usage Cost	1,464.25	740.41	16.52	324.31	174.61	409.73	798.58
Storage Cost	15,908.35	4,779.82	106.65	2,093.60	1,127.20	2,645.05	5,156.03
Realized Hedging	(1) (2,408.51)	(723.66)	(16.15)	(316.97)	(170.66)	(400.46)	(780.61
Total Foot	1,503,037.08	451,502.24	10,076.14	197,805.44	106,498.67	249,906.76	487,147.84
<u>Add: Accrual Adjustments</u> Accrual Adjustment - August 2014	(2,109-70)	[1,445.15]	(19.56)	(334.11)	(74.03)	(89.57)	(147.25
Total Polk Natural Gas Expense	1,500,827,39	450,157.09	10,056.54	157,471,33	196,424.54	245,817.19	487,000.35
\$/Minbtu's	\$2,72						

BAYSIDE UNIT 2

2,408,580

2,354,526

10,472,879.36

(1,985,190.21)

2,287,459.67

3,404,193.56

22,651.39

146,229.13

(22,139.00)

(14,314.35)

13,293,162.24

13,278,547.88.

(936,076.62)

(96,845.04)

1754.3%

Unit 3

27,953

27,325

0.5%

121,538.93

(10,863.27)

(1,173.90)

(23,038.35)

26,546.22

39,506.05

262.87

1,697.01

154,268.63

154,221.92

(256.93)

(46.71)

Unit 4

8,344

8,156

36,279.50

(3,242.70)

(335.48)

(6,876.97)

7,924.08

11,792.60

78.47

506.56

(76.69)

(8.81)

45,049.37

46,040.56

0.2%

	Total
Mmbtu's	
MOPS	
apprend in the state	
Purchases	
Transportation Cost	
Total Fees:	A.S. 15
Aéd: Accruai Adiustments	
Tabal COT Matricel Cas Excende	

and the second of the second	ST-SBETA
Membra's	14.174
MCF'S	14,050
Wof Total And	-1025 0.3%
Purchases	62,495.61
Sale	(5,585.93
imbalance - Pipeline	(577,91
Inventory - Current Month	
Inventory - Prior Month	() an
Reservation Cost	20,314.10
Usage Cost	135.16
Storage Cost	872.60
Realized Hedging	(132.10
Total Feas	77,521.53
<u>Add: Accrual Adlustments</u> Accrual Adjustment - August 2014	[37.28
Accessibilities as hell the second	71,464.25
\$/Mmbbu's	\$5.39

\$10 -	43,200	
40	7.1	K

CALE AND AND EXPERSE CHECK IN	UNERGRAM
aventory Volume (In MMBTU's)	1,038,258
LEACTOR	1.023
I Inventory (In MCF's)	1,014,915
rud: Total MCF's	4,593,577.00
less: PM Engline Inventory (MCF's)	(1,230,388)
Total Purchases (Units)	4,378,104.04

Total

4.423.662

4,324,205

19,296,465.45

(1.724.737.73)

(3,645,901.70)

4,201,034.77

6,272,286.84

41,735.59

269,429.75

(40,791.49

(25,419.88)

24,465,662.91

\$5.53

24,491,082,79

(178,438.69)

100,0%

Unit 1

1,936,266

1,892,733

8,418,835.31

{752.484.07}

(1,595,835.19)

1,838,820.59

2,736,529.65

18.208.78

117,549.23

07,796.58)

(10,953.29)

10,875,023.30

10,685,975.59

(77,850.83)

23.6%

STATE OF A CONCEPTION OF A CASE OF A		
MMBTU'S	4,684,855	
POLK	6%	
BAYSIDE	94%	

\$/Mmbtu's

AND A REAL PROPERTY OF A		
MMBTU'S	4,699,228.50	
MOFS	4,593,577.00	

PURCHASES CALCULATION CM Ending Inventory 1.861,172.17 Total Burn Dollars 25,966,590.30 PM Ending Inventory (4,513,166.03) Total Purchases (5) 25,314,596.49

Total Burn Dollars	25 966 590 30	
Bayside Additives	0.00	
Adi, Burn Dollars	25 966,590,30	

NG Expense (w/o) Adj.	25,994,119.88
less: PM Ending Inv.	(4,513,166.03
VPEM-Baygas Storage Pymt	42,750.00
To: NG Accrual	11,523,703.85
adid:Bayside Lateral	280,328.98
Per: NG Estimate	21,200,624.87
ck Ithis	42,750.00

42,711.02

Unit 5

7,743

7,569

0.2%

33,555.37

[3,009.13]

(6,381.64)

7,353.32

10,943.20

72.82

470.07

(71.17)

[21.50]

0,712.52

(311.32)

Unit 6

34,676

33,896 0.3%

150,770.37

(13,476.01)

(1,394.21)

(28,579.34)

32,930.89

49,007.68

326.10

(318.72)

(37.92)

2,105.15

191,371.91

191,333.99

2.2

nbtu's 375 8 Total ( chases

valance - Pipeline

ervation Cost

lized Hedging

ge Cost

age Cost

Fees

5

-

So

entory - Current Month

L Accruel Adjustments

Accrual Adjustment - August 2014

I Bayside Netural Gas Depense

milory - Prior Month

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-El ACN 15-051-2-2 Subject:

Date:

Reviewed by:

#### Date: \_\_\_\_\_

CONFIDENTIA

Natural Gas Expense Allocation For the Month Ending November 30, 2014 Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015Docket No. 150001-ELACN 15-051-2-2 Subject: OOP/15  $\pm T$ 

12.3

Allocation Factors				
	BS & BB	は、現実設計	PK	TOTAL
MMBTU's	2,633,443		139,366	2,772,809
% of Total	95.0%		5.0%	100.0%

Natural Gas Expense								
和目的政策的國家	小類	BS & BB	的现在分词 化学学	影響	PK	2	TOTAL	
Non-WACOG (\$)	\$ 4	,965,069.26		\$	262,759.43	\$	5,227,828.69	
WACOG (\$)	\$ 9	,239,374.49		\$	488,962.51	\$	9,728,337.00	
EXP True-Up	\$	312,121.03		\$	16,517.95	\$	328,638.98	
Baygas VPEM	\$	40,601.31		\$	2,148.69	\$	42,750.00	
Realized Hedging	\$	861,047.01	BTU Factor:	\$	45,567.99	\$	906,615.00	
TOTAL	\$ 15	,418,213.11	1.024	\$	815,956.56	\$	16,234,169.67	

BAYSIDE & BIG BEND								
	MMBTU's	MCF's	% of Total	\$ Allocation				
Unit 1	1,549,303	1,512,991	58.8%	\$ 9,070,820.35				
Junit 2	1,006,970	983,369	38.2%	\$ 5,895,582.70				
Unit 3	10,767	10,515	0.4%	\$ 63,038.36				
Unit 4	14,560	14,219	0.6%	\$ 85,245.52				
Unit 5	15,742	15,373	0.6%	\$ 92,165.87				
Unit 6	28,095	27,437	1.1%	\$ 164,489.90				
BB CT4	8,006	7,818	0.3%	\$ 46,870.40				
TOTAL	2,633,443	2,571,722	100%	\$ 15,418,213.11				

POLK								
William State	MMBTU's	MCF's	% of Total	\$ Allocation				
Unit <sup>*</sup> 1	101,924	99,535	73.1%	\$	596,742.08			
Unit 1 - Aux	6,997	6,833	5.0%	\$	40,965.86			
Unit 2	4,283	4,183	3.1%	\$	25,076.00			
Unit 3	316	309	0.2%	\$	1,850.11			
Unit 4	10,863	10,608	7.8%	\$	63,600.42			
赋谓 Unit 5	14,983	14,632	10.8%	\$	87,722.09			
TOTAL	139,366	136,100	100%	\$	815,956.56			
\$/Mmbtu's	5.85			1	the second second			

Burn per Allegro								
	Bayside Burn	Polk Burn	Total					
FGT	5,261,621.92	565,211.24	5,826,833.16					
Gulfstream	4,510,787.00	-	4,510,787.00					
Total	9,772,408.92	565,211.24	10,337,620.16					
Allocated	9,239,374.49	488,962.51	9,728,337.00					
Variance	533,034.43	76,248.73	609,283.16					
	CONFI	DENTIAL						

Natural Gas Expense Allocation For the Month Ending December 31, 2014

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015Docket No. 150001-EI ACN 15-051-2-2 Subject: OP/ls

t h

Allocation Factors							
	BS & BB	ANARY A PKater	TOTAL				
MMBTU's	2,519,909	126,003	2,645,912				
% of Total	95.2%	4.8%	100.0%				

		Nat	ural Gas Exp	ense	8		-		
2月8月8日的第三人称单数	all a	BS & BB	for a			PK	飂	TOTAL	
Non-WACOG (\$)	\$	5,045,370.89			\$	252,283.70	\$	5,297,654.59	
WACOG (\$)	\$	11,603,579.82			\$	580,213.85	\$	12,183,793.67	
Prior Period True Up	\$	(14,421.30)			\$	(721.11)	\$	(15,142.41)	
Baygas VPEM	\$	(122,142.51)			\$	(6,107.49)	\$	(128,250.00)	
Realized Hedging	\$	(331,189.53)	BTU Facto	r:63	\$	(16,560.47)	\$	(347,750.00)	-
Bayside Lateral			" 编码到				\$	325,731.79	2
TOTAL	\$	16,181,197.37	1.028	- BE	\$	809,108.48	\$	17,316,037.64	

	BAYSIDE & BIG BEND								
的是 医眼镜镜 1	MMBTU's	MCF's	% of Total	E P	\$ Allocation				
Unit 1	272,282	264,866	10.8%	\$	1,748,416.11				
Unit 2	2,202,213	2,142,231	87.4%	\$	14,141,164.96				
Unit 3	4,505	4,382	0.2%	\$	28,928.15				
Unit 4	14,384	13,992	0.6%	\$	92,364.60				
Unit 5	8,632	8,397	0.3%	\$	55,429.03				
Unit 6	16,154	15,714	0.6%	\$	103,730.37				
BB CT4	1,739	1,691	0.1%	\$	11,164.15				
TOTAL	2,519,909	2,451,273	100%	\$	16,181,197.37				

POLK								
	MMBTU's	MCF's	% of Total	16	\$ Allocation			
Unit 1	40,823	39,711	32.4%	\$	262,138.48			
Unit 1 - Aux	7,351	7,151	5.8%	\$	47,203.29			
	26,916	26,183	21.4%	\$	172,836.87			
Unit 3	4,986	4,850	4.0%	\$	32,016.82			
Unit 4	17,832	17,346	14.2%	\$	114,505.39			
Unit 5	28,095	27,330	22.3%	\$	180,407.63			
TOTAL	126,003	122,571	100%	\$	809,108.48			
\$/Mmbtu's	6.42	CONFIDE	INTIAL					
			INTIAL					

Burn per Allegro					
	Bayside Burn	Polk Burn	Total		
FGT	7,614,318.59	597,866.76	8,212,185.35		
Gulfstream	2,999,898.32	-	2,999,898.32		
Total	10,614,216.91	597,866.76	11,212,083.67		
Allocated	11,503,579.82	580,213.85	12,183,793.67		
Variance	(989,362.91)	17,652.91	(971,710.00)		

Natural Gas Expense Allocation For the Month Ending January 31, 2015 Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2 Subject CL of 15

IT

1443年1月1日1月1日1月1日日	Allocation Factors	S L BELFER	NY BEAUTORN FT A THE REAL
	BS& BB	PK	TOTAL
MMBTU's	4,361,723	103,747	4,465,470
% of Total	97.7%	2.3%	100.0%

	Nat	tural Gas Expense		10.04	
·新闻的"建制"的"这个人"。	BS & BB	地方法定得受益的	PK	部部	TOTAL
Non-WACOG (\$)	\$ 5,050,896.13	\$	120,139.52	\$	5,171,035.65
WACOG (\$)	\$ 14,496,964.53	\$	344,821.66	\$	14,841,786.19
Prior Period True Up	\$ 92,709.66	\$	2,205.17	\$	94,914.83
Baygas VPEM	\$ (41,756.78)	) \$	(993.22)	\$	(42,750.00)
Realized Hedging	\$ 2,516,791.15	\$	59,863.85	\$	2,576,655.00
Bayside Lateral	\$ 306.00			\$	306.00
TOTAL	\$ 22,115,910.68	5	526,036.99	\$	22,641,947.67

BAYSIDE & BIG BEND							
法法国任何法 这些常常	MMBTU's	MCF's	% of Total		\$ Allocation		
Bayside	4,345,089	4,234,980	99.6%	\$	22,031,263.93		
Big Bend	16,634	16,212	0.4%	\$	84,340.75		
TOTAL	4,361,723	4,251,192	100%	5	22,115,604.68		
\$/Mmbtu's	5.07			-			

	BAYSIDE				
	MMBTU's	MCF's	% of Total	\$ Allocation	
Unit 1	1,180,576	1,150,659	27.2%	\$	5,986,055.22
Unit 2	3,120,592	3,041,513	71.8%	\$	15,822,815.34
Unit 3	11,172	10,889	0.3%	5	56,647.10
Unit 4	22,167	21,605	0.5%	5	112,396.73
Unit 5	4,783	4,662	0.1%	\$	24,251.98
Unit 6	5,799	5,652	0.1%	\$	29,403.56
TOTAL	4,345,089	4,234,980	100%	\$	22,031,569.93
\$/Mmbtu's	5.07				

Manufactor - 15 Jane 15	BIG BEND				
	MMBTU's	MCF's	% of Total		\$ Allocation
BB CT4	14,918	14,540	89.7%	5	75,639.97
Unit 1			0.0%	5	-
Unit 2	*	-	0.0%	\$	-
Unit 3	1,716	1,673	10.3%	5	8,700.78
Unit 4		-	0.0%	\$	-
TOTAL	16,634	16,213	100%	5	84.340.75
\$/Mmbtu's	5.07			1.	

		POLK	a strengthe	
	MMBTU's	MCF's	Not total 11	Attocation
Unit 1	10,280	10,019	9.9%	\$ 52,123.53
Unit 1 - Aux	4,339	4,229	4.2%	\$ 22,000.39
Unit 2	30,714	29,936	29.6%	\$ 155,731.73
Unit 3	5,818	5,671	5.6%	\$ 29,499.49
Unit 4	5,053	4,925	4.9%	\$ 25,620.64
Unit 5	47,543	46,338	45.8%	\$ 241,061.20
TOTAL	103,747	101,118	100%	\$ 526.036.99
\$/Mmbtu's	5.07			

GRAND TOTAL 4,465,470 4,352,311 \$ 22,641,947,67

1,026

BTG Facior

Barn per Allegro Bayside Burn Polk Burn Total FGT 11,346,516.79 373,452.05 11,719,968.84 Gulfstream 2,963,079.38 2,953,079.38 Total 14,309,596.17 373,452.05 14,683,048.22 Allocated 14,496,964.53 344,821.66 14,841,786.19 Variance (187,368.36) 28,630.39 (158,737.97) ۱

Natural Gas Expense Allocation For the Month Ending February 28, 2015

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-El ACN 15-051-2-2 08/15 Subject:

WA FT

	All	location Factors		MO INSTANCES IN
「「「「「「「」」」の ない ない たいです。	BS & 88	國家國家自主,將除了	PK	TOTAL
MMBTU's	3,895,720		229,172	4,124,892
% of Total	94.4%		5.6%	100.0%

	Nat	tural Gas Expense	The All Contracts	-	Start Strates Marks
の語れていることである。	BS & BB	建制的2017月后有1	PK	135	TOTAL
Non-WACOG (\$)	\$ 4,347,357.16		\$ 255,740.29	5	4.603.097.45
WACOG (S)	\$ 12,334,531.60		\$ 725,598.69	5	13,060,130,29
Prior Period True Up	\$ 153,960.62		\$ 9,056.98	5	163.017.60
Baygas VPEM	\$ (40,374.88)		\$ (2,375,12)	5	(42,750,00)
Realized Hedging	\$ 3,258,460.79		\$ 191.684.21	5	3 450 145 00
Bayside Lateral	\$ -			s	-
TOTAL	\$ 20,053,935.29	Rest in the second	\$ 1,179,705.05	S	21,233,640,34

the first of the set of the	BAYS	IDE & BIG BEND	No. The second	mine	A DESCRIPTION OF THE OWNER
	MMBTU's	MCF's	% of Total	12.00	\$ Allocation
Bayside	3,846,189	3,756,044	98.7%	15	19.798.965.86
Dig Bend	49,531	48,370	1.3%	IS	254,969,43
TOTAL	3,895,720	3,804,414	100%	15	20.053.935.29
\$/Mmbtu's	5.15			1.	

all the second second		BAYSIDE	Ren and the		
	MMBTU'S	MCF's	% of Total	115	\$ Allocation
Unit 1	2,396,358	2,340,193	62.3%	\$	12.335.693.91
Unit 2	1,392,909	1,360,263	36.2%	15	7.170.255.48
Unit 3	17,380	16,973	0.5%	Ś	89,456,75
Unit 4	5,910	5,771	0.2%	IS	30,422,81
Unit 5	19,351	18,897	0.5%	5	99 612 83
Unit 6	14,281	13,946	0.4%	S	73.514.08
TOTAL	3,846,189	3,756,043	100%	is	19 798 965 86
\$/Mmbtu's	5.15			1.	10,00,000

Mr. S.I.C.Mart. S.S.	Participant and a second state of the	BIG BEND					
部が非常に多いにな	MMBTU's	MCF's	s % of Total §		Allocation		
BB CT4	4,438	4,334	9.0%	5	22 844.91		
Unit 1		-	0.0%	S			
Unit 2		-	0.0%	1s			
Unit 3	45,093	44,036	91.0%	1S	232 124 52		
Unit 4			0.0%	15			
TOTAL	49,531	48,370	100%	15	754 969 43		
\$/Mmbtu's	5.15			1.4	234,505.45		

		POLK	And the second second second		
	MMBTU's	MCF's	% of Total	8	\$ Allocation
Unit 1	29,041	28,360	12.7%	S	149 493 89
Unit 1 - Aux	6,254	6,117	2.7%	S	32,245.09
Unit 2	29,789	29,091	13.0%	S	153,344,36
Unit 3	29,191	28,507	12.7%	Ś	150,266,05
Unit 4	56,662	55,334	24.7%	S	291 678 07
Unit 5	78,225	76,392	34.1%	S	402 577 59
TOTAL	229,172	223,801	100%	S	1.179.705.05
\$7Mmbtu's	515			1.2	

GRAND TOTAL 4,124,892 4,028,214 Ś 21,233,640.34

BIU Eactor 024

1.	Burn per Al	legro			
	Bayside Burn	Polk Burn	Total		
FGT	8,860,225.39	758,435.62	9.618.661.01		
Gulfstream	3,119,955.26		3.119.955.26		
Total	11,980,180.65	758,435.62	12,738,616,27		
Allocated	12,334,531.50	725,598.69	13,060,130,29		
Variance	(354,350.95)	32,836.93	(321,514.02)		
12. 1	1.9		(1.17)		

CONFIDENTIAL

#### **Tampa Electric Company**

Natural Gas Expense Allocation For the Month Ending March 31, 2015 Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-ELACN 15-051-2-2 Subject:

1

1

	Allocation F	actors	NEW CONTRACTOR OF THE PLAN	
の高額時代でもなる	BS & BB	PK	TOTAL	
MMBTU's	5,707,934	566,707	6,274,641	. 11
% of Total	91.0%	9.0%	100.0%	X

A Chuve de lies	Natural Gas I	Expense	
	BS & BB	PK	TOTAL
Non-WACOG (\$)	\$ 4,786,453.31	\$ 475,218.63	\$ 5,261,671.94
WACOG (\$)	\$ 16,457,918.72	\$ 1,635,002.23	\$ 18,102,920.95
Prior Period True Up	\$ 281,804.07	\$ 27,978.66	\$ 309,782,73
Baygas VPEM	\$ (38,888.95)	\$ (3,861.05)	\$ (42,750.00)
Realized Hedging	\$ 3,037,290.40	\$ 301,554.60	3,338,845.00
Bayside Lateral	\$ 2,822.99		\$ 2,822.99
TOTAL	\$ 24,537,400.55	\$ 2,435,893.06	\$ 26,973,293.61

	BAYS	IDE & BIG BEND		
	MMBTU's	MCF's	% of Total	\$ Allocation
Bayside	5,698,212	5,553,813	99.8%	\$ 24,492,789.20
Big Bend	9,722	9,476	0.2%	\$ 41,788.35
TOTAL	5,707,934	5,563,289	100%	\$ 24,534,577.56
\$/Mmbtu's	4.30			An other second state in the second state

	BAYSIDE					
	MMBTU's	MCF's	% of Total	\$ Allocation		
Unit 1	2,954,401	2,879,533	51.8%	5	12,700,450.80	
Unit 2	2,675,212	2,607,419	46.9%	\$	11,500,266.34	
Unit 3	23,204	22,616	0.4%	\$	99,749.92	
Unit 4	13,751	13,403	0.2%	\$	59,113.13	
Unit 5	7,546	7,355	0.1%	S	32,438.93	
Unit 6	24,098	23,487	0.4%	15	103,593.07	
TOTAL	5,698,212	5,553,813	100%	15	24,495,512.19	
\$/Mmbtu's	4.30					

	BIG BEND				
	MMBTU's	MCF's	% of Total	\$ Allocation	
BB CT4	9,722	9,476	100.0%	\$	41,788.35
Unit 1		-	0.0%	5	-
Unit 2		-	0.0%	5	
Unit 3	-		0.0%	\$	-
Unit 4			0.0%	5	
TOTAL	9,722	9,476	100%	5	41,788.35
\$/Mmbtu's	4.30			1	

1

POLK MMBTU's MCF's % of Total \$Allocation Unit 1 127,951 124,709 22.6% 549,975.48 \$ Unit 1 - Aux 1,752 0.3% 1,708 \$ 7,530.67 Unit 2 92,154 89,819 16.3% 396,108.20 \$ Unit 3 58,929 57,436 10.4% \$ 253,296.22 Unit 4 171,679 167,328 30.3% 737,932.80 \$ Unit 5 114,242 111,347 20.2% \$ 491,049.59 TOTAL 566,707 552,347 100% \$ 2,435,893.06 \$/Mmbtu's 4.30

GRAND TOTAL 6,274,641 6,115,636 \$ 26,973,293.61

STU Fador:

10 112	Burn per Al	legro	1
-	Bayside Burn	Polk Burn	Total
FGT	11,768,328.03	1,719,356.99	13,487,685.02
Gulfstream	4,904,567.54	-	4,904,667.54
Total	16,672,995.57	1,719,356.99	18,392,352.56
Allocated /	16,467,918.72	1,635,002.23	18,102,920.95
Variance	205,076.85	84,354.76	289,431.61
100			(0.14

SOURCE

## Tampa Electric Company

Natural Gas Expense Allocation For the Month Ending April 30, 2015 Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-ELACN 15-051-2-2 Subject:

	All	ocation Factors		
目的ななななのない	8S & 88	1413至365月9	PK	TOTAL
MMBTU's	5,142,739		717,166	5,859,905
% of Total	87.8%		12.2%	100.0%

		Nati	ural Gas Expense	1	·结理"限制"的	1	AT THE ST
		BS& BB	合有3年2月1日和1月1	官臣	PK	A 36	TOTAL
Non-WACOG (\$)	5	5,602,250.96		\$	781,245.98	\$	6,383,496.94
WACOG (\$)	S	13,693,807.85		\$	1,909,631.03	\$	15,603,438.88
Prior Period True Up	\$	33,488.67		\$	4,670.07	\$	38,158,74
Baygas VPEM	\$	(37,518.03)		\$	(5,231.97)	\$	(42,750.00)
Realized Hedging	5	3,009,191.73		\$	419,638.27	5	3,428,830.00
Bayside Lateral	5	7,497.76				\$	7,497.76
TOTAL	\$	22,308,718.94		\$	3,109,953.38	\$	25,418,672.32

	BAYS	DE & BIG BEND	AND STREET	1.5	
	MMBTU's	MCF's	% of Total	2. 释义	\$ Allocation
Bayside	5,117,796	4,992,972	99.5%	S	22,193,058.45
Big Bend	24,943	24,334	0.5%	\$	108,162.73
TOTAL	5,142,739	5,017,306	100%	\$	22,301,221.18
\$/Mmbtu's	434				

	BAYSIDE					
	MMBTU's	MCF's	% of Total	\$ Allocation		
Unit 1	1,432,699	1,397,755	28.0%	\$	6,214,924.29	
Unit 2	3,646,942	3,557,992	71.3%	\$	15,820,118 83	
Unit 3	8,319	8,116	0.2%	5	36,087.10	
Unit 4	15,912	15,524	0.3%	\$	69,024.88	
Unit 5	4,418	4,310	0.1%	\$	19,164.90	
Unit 6	9,506	9,274	0.2%	\$	41,236.21	
TOTAL	5,117,796	4,992,971	100%	\$	22,200,556.21	
\$/Mmbtu's	4.34					

	BIG BEND					
的理論語言的	MMBTU's	MCF's	% of Total	\$ Allecation		
BB CT4	10,220	9,970	41.0%	5	44,317.20	
Unit 1 IGN	•		0.0%	\$	-	
Unit 2 IGN			0.0%	\$		
Unit 31GN	14,723	14,364	59.0%	\$	63,845.5	
Unit 4 IGN		-	0.0%	\$		
TOTAL	24,943	24,334	100%	5	108,162.73	
\$/Mmbtu's	4.34					

	POLK				
3787%利用的印度	MMBTU's	MCF's	% of Total	2 202	\$ Allocation
Unit 1 IGN	260	254	0.0%	\$	1,127.48
Unit 1 · Aux	2,914	2,843	0.4%	\$	12,635.41
Unit 2	209,541	204,430	29.2%	\$	908,663.74
Unit 3	147,633	144,032	20.6%	\$	640,202.89
Unit 4	269,532	262,958	37.6%	\$	1,168,811.62
Unit S	87,286	85,157	12.2%	\$	378,511.24
TOTAL	717,166	699,674	100%	5	3,109,953.38
\$/Mmbtu's	4.34				

GRAND TOTAL 5,859,905 5,716,979 \$ 25,418,672.32

BTU Factor: 1025

	Burn per Al	legro	
	Bayside Burn	Polk Burn	Total
FGT	9,428,315.94	1,980,456.83	11,408,772.77
Gulfstream	4,130,476.75	-	4,130,476.75
Total	13,558,792.69	1,980,456.83	15,539,249.52
Allocated	13,693,807.85	1,909,631.03	15,603,438.88
Variance	(135.015.16)	70,825.80	(64,189.36)
_			0.02

SOURCE\_

1

## **Tampa Electric Company**

Natural Gas Expense Allocation

For the Month Ending May 31, 2015

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-ELACN 15-051-2-2 Subject: CLOPIIS

	All	location Factors		
1月11月1日日(1月1日)	85 & 88	法和法律实际	PK	TOTAL
MMBTU's	6,320,384		995,795	7,316,179
% of Total	86.4%	All changes and	13.6%	100,0%

	Natural Gas Expe	nse	Provide State		The second
地理124度 网络	BS & BB	1 28	PK	5.23	TOTAL
Non-WACOG (\$)	\$ 6,448,005.68	\$	1,015,902.17	\$	7,463,907.85
WACOG'(\$)	\$ 17,331,728.13	\$	2,730,664.50	\$	20,062,392.63
Prior Period True Up	\$ (222,744.92)	\$	(35,094.11)	15 3	医德(257839:03)
Baygas VPEM	\$ (36,931.36)	\$	(5,818.64)	\$	(42,750.00)
Realized Hedging	\$ 3,764,475.82	S	593,104.18	\$	4,357,580.00
Bayside Lateral	\$ 217,489.34			\$	217,489.34
TOTAL	\$ 27,502,022.69	\$	4,298,758.10	-5.7	31,800,780.79

BAYSIDE & BIG BEND									
· (2)	MMBTU's	MCF's	% of Total	1.873	\$ Allocation				
Bayside	6,260,817	6,108,114	99.1%	\$	27,027,387.93				
Big Bend	59,567	58,114	0.9%	\$	257,145.42				
TOTAL	6,320,384	6,156,228	100%	\$	27,284,533.35				
\$/Mmbtu's	4.32			200100					

BAYSIDE									
	MMBTU's 有限	MCF's	% of Total		\$ Allocation				
jUnit 1	2,689,615	2,624,015	43.0%	\$	11,704,260.10				
Unit 2	3,527,214	3,441,184	56.3%	\$	15,349,196.85				
Unit 3	10,380	10,127	0.2%	\$	45,170.12				
Unit 4	17,356	15,933	0.3%	\$	75,527.22				
Unit 5	5,534	5,399	0.1%	\$	24,082.02				
Unit 6	10,718	10,457	0.2%	\$	46,640.97				
TOTAL	6,260,817	6,108,115	100%	\$	27,244,877.27				
\$/Mmbtu's	4.35								

BIG BEND									
的权利是	MMBTU's	MCF's	% of Total	\$"Allocation					
BB CT4	17,485	17,059	29.4%	\$	75,481.18				
UNITIUGN		-	0.0%	\$	-				
Unit 2 IGN	-	-	0.0%	\$					
Unit 3 IGN	13,677	13,343	23.0%	\$	59,040.88				
Unit 4 IGN	28,405	27,713	47.7%	\$	122,623.36				
TOTAL	59,567	58,115	100%	\$	257,145.42				
\$/Mimbtu's	4.32								

POLK									
私認認問	MMBTU's	MCF's	% of Total	\$ Allocation					
Unit 1 IGN	538,134	525,009	54.0%	\$ 2,323,076					
Unit 1 - Aux	10,667	10,407	1.1%	\$ 46,048					
La Unit 2:	42,452	41,417	4.3%	\$ 183,261					
Whit 3	43,021	41,972	4.3%	\$ 185,717					
SUNIT 4	157,799	153,950	15.8%	\$ 681,204					
Unit's	203,722	198,753	20.5%	\$ 879,449					
TOTAL	995,795	971,508	100%	\$ 4,298,758					
S/Mmbtu's	4.32								

GRAND TOTAL 7,316,179 7,137,738 \$ 31,800,780.79

BITE Pactor: 1.925

Burn per Allegro							
	Bayside Burn	Polk Burn	Total				
FGT	13,601,662.20	2,934,504.85	16,536,167.05				
Gulfstream	3,974,639.25	-	3,974,639.25				
Total	17,576,301.45	2,934,504.85	20,510,806,30				
Allocated	17,331,728.13	2,730,664.50	20,062,392.63				
Variapce	244,573.32	203,840.35	448,413.67				
1.0			0.01				

SOURCE\_\_\_\_

k

## Tampa Electric Company

Natural Gas Expense Allocation For the Month Ending June 30, 2015 Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2 Subject: GL 0P/15

	Al	location Factors		
	BS & BB	となったことで	PK	TOTAL
MMBTU's	6,681,479		1,444,336	8,125,815
% of Total	82.2%	8、6、2、2、2、1	17.8%	100.0%

Natural Gas Expense							
		BS & BB	のでのないです。		PK	3610	TOTAL
Non-WACOG (\$)	\$	5,519,983.12		\$	1,193,255.25	\$	6,713,238.37
WALOG (\$)	\$	20,539,801.07		\$	4,440,090.64	\$	24,979,891.71
Prior Period True Up	\$	19,270.52		\$	4,165.71	\$	23,436.23
Baygas VPEM	\$	(35,151.33)		\$	(7,598.67)	\$	(42,750.00)
Realized Hedging	\$	2,759,716.78		\$	596,568.22	\$	3,356,285.00
Bayside Lateral	\$	38,908.48				\$	38,908.48
TOTAL	\$	28,842,528.65		\$	6,225,481.15	\$	35,069,009.80

BAYSIDE & BIG BEND								
他们们在100000000000000000000000000000000000	MMBTU's	MCF's	% of Total		\$ Allocation			
Bayside	6,638,103	6,476,198	99.4%	\$	28,616,626.05			
Big Bend	43,376	42,318	0.6%	\$	185,994.12			
TOTAL	6,681,479	6,518,516	100%	\$	28,803,620.17			
\$/Mmbtu's	4.31							

BAYSIDE									
	MMBTU's	MCF's	% of Total	开始的	\$ Allocation				
Unit 1	2,837,374	2,768,170	42.7%	\$	12,248,449.39				
Unit 2	3,730,540	3,639,551	56.2%	5	16,104,091.45				
Unit 3	30,217	29,480	0.5%	5	130,441.53				
Unit 4	10,617	10,358	0.2%	\$	45,831.74				
Unit 5	3,134	3,058	0.0%	5	13,528.93				
Unit 6	26,221	25,581	0.4%	\$	113,191.49				
TOTAL	6,638,103	6,476,198	100%	\$	28,655,534.53				
\$/Mmbtu's	4.32								

BIG BEND									
A Designation	MMBTU's	MCF's	% of Total	1002	\$ Allocation				
BB CT4	21,059	20,546	48.6%	\$	90,786.32				
Unit 1 IGN	•	-	0.0%	\$	-				
Unit 2 IGN	8,240	8,039	19.0%	\$	35,522.35				
Unit 3 IGN	9,929	9,687	22.9%	\$	42,803.57				
Unit 4 IGN	4,148	4,047	9.6%	15	17,881.88				
TOTAL	43,376	42,319	100%	\$	186,994.12				
\$/Mmbtu's	4.31								

POLK									
	MMBTU's	MCF's	% of Total	1	\$ Allocation				
Unit 1 IGN	740,289	722,233	51.3%	\$	3,191,359.56				
Unit 1 - Aux	5,862	5,719	0.4%	\$	25,270.87				
Unit 2	110,425	107,732	7.6%	\$	476,038.25				
Unit 3	139,407	136,007	9.7%	\$	600,978.62				
Unit 4	219,564	214,209	15.2%	\$	946,532.60				
Unit 5	228,789	223,209	15.8%	\$	986,301.25				
TOTAL	1,444,336	1,409,109	100%	5	6,226,481.15				
\$/Mmbtu's	4.31								

GRAND TOTAL 8,125,815 7,927,626 \$ 35,069,009.80

BTU Faction

Burn per Allegro									
	Bayside Burn	Polk Burn	Total						
FGT	14,247,210.33	4,274,601.47	18,521,811.80						
Gulfstream	5,512,192.00	-	5,512,192.00						
Total	19,759,402.33	4,274,601.47	24,034,003.80						
Allocated	20,539,801.07	4,440,090.64	24,979,891.71						
Variance	(780,398.74)	(165,489.17)	(945,887.91)						
			(0.01)						

SOURCE\_\_\_\_\_

1

ł

Workpaper page numbers 44-1 through 44-7.1 have been redacted.

ш
F
C
A
ш
R

Groupdesc	Company	Counterparty	Tradebook	Contract	Trade	Quantity	Net	Debit	Credit	Product	Beg time	End time
	TEC		TEC-NG-Deriva	100379	100077		-62,100.00	1,222,500.00	1,284,600.00	NG FIN	12/1/2014 12:00:00 AM	1/1/2015 12:00:00 AM
	TEC		TEC-NG-Deriva	100385	10-14		-10,520.00	1,316,900.00	1,327,420.00	NG ĘIN	12/1/2014 12:00:00 AM	1/1/2015 12:00:00 AM
	TEC		TEC-NG-Deriva	100391	100075		-6,100.00	208,000.00	214,100.00	NG FIN	12/1/2014 12:00:00 AM	1/1/2015 12:00:00 AM
	TEC		TEC-NG-Deriva	100396	and and		-54,400.00	2,086,600.00	2,141,000.00	NG FIN	12/1/2014 12:00:00 AM	1/1/2015 12:00:00 AM
	TEC		TEC-NG-Deriva	100403-	100093		-63,400.00	793,000.00	856,400.00	NG FIN	12/1/2014 12:00:00 AM	1/1/2015 12:00:00 AM
	TEC		TEC-NG-Deriva	100408	100091		-67,200.00	789,200.00	856,400.00	NG FIN	12/1/2014 12:00:00 AM	1/1/2015 12:00:00 AM
	TEC	Real Property in	TEC-NG-Deriva	100429			-84,180.00	2,890,400.00	2,954,580.00	NG FIN	12/1/2014 12:00:00 AM	1/1/2015 12:00:00 AM
	TEC		TEC-NG-Dertva	100417	1.5		-19,850.00	622,450.00	642,300.00	NG FIN	12/1/2014 12:00:00 AM	1/1/2015 12:00:00 AM
							-347,750.00			Later Bright	The second second second	

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2 Subject: Arcurus arct 10 45 L1 54 1 49

SOURCE\_

## REDACTED

1

ł



Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-ELACN 15-051-2-2 Subject: transactions Listing 0P/15 IT

LUNFIDENTIAL

SOURCE\_\_\_\_

1	
L	Ш
ł	-
(	5
	A
(	
L	ш
(	Y

Groupdesc	Company	Counterparty	Tradebook	Contract	Trade	Quantity	Net		Debit	Credit	Product	Beg time	End time
TEC	TEC		TEC-NG-Derive	at	1			3,450,145.00	9,955,965.00	6,505,820.0	NG FIN	2/1/2015 12:00:00 AM	3/1/2015 12:00:00 AM
	EC		TEC-NG-Derive	100385	1			1,110,350.00	2,973,250.00	1,862,900.0	NG FIN	2/1/2015 12:00:00 AM	3/1/2015 12:00:00 AM
	EC and		TEC-NG-Dertva	aL'100391	10011		1	127,400.00	414,000.00	286,600,0	NG'FIN	2/1/2015 12:00:00 AM	3/1/2015 12:00:00 AM
	EC		TEC-NG-Derive	100398				802,600.00	2,235,600.00	1,433,000.0	NG FIN	2/1/2015 12:00:00 AM	3/1/2015 12:00:00 AM
	EO		TEC-NG-Derive	at 100403	STESS-		50	720,200.00	2,298,500.00	1,576,300.0	NG FIN	2/1/2015 12:00:00 AM	3/1/2015 12-00:00 AM
	EC		TEC-NG-Deriva	t 100411				407,145.00	1,352,925.00	52,925.00 945,780.00 NG	NG FIN	2/1/2015 12:00:00 AM	M 3/1/2015 12:00:00 AM
	ECUL		TEC-NG-Deriva	it 100417	10012		<b>予</b> 項	282,450.00	683,690.00	401,240.0	NG FIN	2/1/2015 12:00:00 AM	3/1/2015 12:00:00 AM
fotal	1. Start			a antipitation for an				3,450,145.00		Contra Manager	A CALCULATION DESCRIPTION	And an and the second second second second second	
ALCONDARY AND REAL TOPOLO	111388971						1 12	2.	12				

2150 TTT Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-E1 ACN 15-051-2-2 Docket No. 150001-E1 ACN 15-051-2-2

-

SOURCE\_

bunterparty	Tradebook	Contract	Trade	Quantity	Net	-	Debit	Credit	Product	Beg time	End time
	TEC-NG-Derivat	100718	101616		1	-16,900.00	359,320.00	376,220.00	NG FIN	3/1/2015 12:00:00 AM	4/1/2015 12:00:00 AM
	TEC-NG-Derivat				2000	3,355,745.00	11,384,165.00	8,028,420.00	NG FIN	3/1/2015 12:00:00 AM	4/1/2015 12:00:00 AM
	TEC-NG-Derivat	100385				856,710.00	2,853,570.00	1,996,860.00	NG FIN	3/1/2015 12:00:00 AM	4/1/2015 12:00:00 AM
	TEC-NG-Derivat	100391			Constant of the second	409,900.00	1,278,100.00	868,200.00	NG FIN	3/1/2015 12:00:00 AM	4/1/2015 12:00:00 AM
	TEC-NG-Derivat	100396	100132			395,400.00	1,263,600.00	868,200.00	NG FIN	3/1/2015 12:00:00 AM	4/1/2015 12:00:00 AM
	TEC-NG-Derivat	100403	100145			211,200.00	790,000.00	578,800.00	NG FIN	3/1/2015 12:00:00 AM	4/1/2015 12:00:00 AM
	TEC-NG-Derivat	100408			and the second	218,400.00	1,378,000.00	1,157,600.00	NG FIN	3/1/2015 12:00:00 AM	4/1/2015 12:00:00 AM
	TEC-NG-Derivat	100429	100142		(BS) S	154,100.00	443,500.00	289,400.00	NG FIN	3/1/2015 12:00:00 AM	4/1/2015 12:00:00 AM
	TEC-NG-Derivat	100411				873,810.00	2,349,750.00	1,475,940.00	NG FIN	3/1/2015 12:00:00 AM	4/1/2015 12:00:00 AM
	TEC-NG-Derivat	100719	101616		50 100	16,900.00	376,220.00	359,320 00	NG FIN	3/1/2015 12:00:00 AM	4/1/2015 12:00:00 AM
	TEC-NG-Derivat	100414	100140			154,100.00	443,500.00	289,400.00	NG FIN	3/1/2015 12:00:00 AM	4/1/2015 12:00:00 AM
	TEC-NG-Derivat	100417	100141		DE:	65,225.00	209.925.00	144,700,00	NG FIN	3/1/2015 12:00:00 AM	4/1/2015 12:00:00 AM
	The state of the	CHOME IN .	companyation.		1.000 0.00	3,338,845.00	See and the second second	ALL PROPERTY OF	CHARLES AND YOR OF S	G HEVIO ILCOLO PAR	40 112010 12.00.00 MM

CONFIDENTIAL ++ 2) 80 Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EL ACN 15-051-2-2 Docket No. 150001-EL ACN 15-051-2-2

1

SOURCE

REDACTED

## REDACTED

TEC-NG-Derivat 100417 TEC-NG-Denivat 100414 TEC-NG-Derivat 100396 EC-NG-Derival 100411 EC-NG-Derivel 100429 EC-NG-Darivat 100408 TEC-NG-Derivat 100403 100157 100151 Listing) oglis tt 2.13 3,428,830.00 495,550.00 251,420.00 241,350.00 547,300.00 305,800.00 230,400.00 586,760.00 65,950.00 2/3 1,531,550,00 1,036,000.00 4/1/2015 12:00:00 AM 1,157,820.00 1,583,300.00 1,036,000.00 4/1/2015 12:00:00 AM 1,648,660.00 1,061,900.00 4/1/2015 12:00:00 AM 849,700.00 629,850.00 748,400.00 195,450.00 CONFIDENTIAL 129,500.00 4/1/2015 12:00:00 AM 543,900.00 4/1/2015 12:00:00 AM 908,500.00 4/1/2015 12:00:00 AM 388,500.00 41/2015 12:00:00 AM 518,000.00 4/1/2015 12:00:00 AM

5/1/2015 12:00:00 AM 5/1/2015 12:00:00 AM SP1/2015 12:00:00 AM

5/1/2015 12:00:00 AM

5/1/2015 12:00:00 AM ST12015 12:00:00 AM 5/1/2015 12:00:00 AM

SOURCE

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015

Subject: -

Docket No. 150001-EI ACN 15-051-212

vausactions

1

44-12

Tradebook

Contract

Trade

Quantity

Za

Debit

3,428,630.00 11,121,130.00 7,692,300.00 4/1/2015 12:00:00 AM

Credit

Bag time

2,778,300.00 2,072,000.00 4/1/2015 12:00:00 AM

5/1/2015 12:00:00 AM 5/1/2016 12:00:00 AM

5/1/2015 12:00:00 AM End time

704,300.00

TEC-NG-Derivel 100391 FEC-NG-Derival 100385 **TEC-NG-Derivet** 

C-NG-Derfva えるしま Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 2-13 ┢ Docket No. 150001-EI ACN 15-051-2-2 Listing ansactions 150,200.00 443,400.00 4,357,580.0 443,400.00 158,400.00 -\$78,879.00 2.13 08/15 1,198,500.00 1,157,000.00 TT 1,107,480.00 1,884,150,00 1,000,000,000 755,100.00 1,008,800.00 CONFIDENTIAL ۱ ł 4/1/2015 12:00:00 AM 4/1/2015 12:00:00 AM 471/2015 12:00:00 AM

SOURCE.

Subject:

ST/2015 1230000 AM SY/2015 1230000 AM SY/2015 1230000 AM SY/2015 1230000 AM

C-NG-Denin

EC-NO-Deriva

443,400.00 999,703.00 2,010,150.00

3,378,850.00 18,813,130.8

2,391,150.00 755,100.00

5,408,100.00 00.000,000

3,397,950,00

503,400.00 755,100.00

256,000.00

1,198,500.00

4/1/2015 12:00:00 AM 41/2015 12:00:00 MM 4/1/2015 12:00:00 NM 4/1/2015 12:00:00 AM

51/2015 (230.00 AM 51/2015 (230.00 AM 51/2015 (230.00 AM 51/2015 (230.00 AM

SY12015 1200:00 AM

1,163,200.00

4,357,580.0

12,255,550.0

471/2015 12:00:00 AM

1

1,198,500.00

C-NO-Den

## REDACTED



SOURCE\_\_\_\_\_

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015

1

1

Docket No, 150001-EI ACN 15-051-2-2

LISTIMA

08/15" It

CONFIDENTIAL

Subject: transactions

44-14

![](_page_36_Figure_1.jpeg)

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI AÇN 15-051-2-2 Subject: Transactions Listings O Plis IT

CONFIDENTIAL l

153 82 TOURCE. 

![](_page_37_Picture_0.jpeg)

Tampa Electric Company Hedging Audit Docket No.150001-El Period Ended July 31, 2015 Control No. 15-051-2-2

#### Auditor: Intesar Terkawi File Name: Hedging Transactions

 $f_{\mu\nu}$ 

100

Transaction Instrument	Transaction Number	Volume	Market Price	Settlement Price	Gain/loss on Hedging Transactions
September Transactions					A (6%)
	Ye	-1	45-1_	46-1.) (	Ar
Commodity Swap Transaction	14882			4.0450	(17,600.00)
Commodity Swap Transaction	15133 15	-1.3		5-1-3 4.0080	(10,200.00)
Commodity Swap Transaction	15420 45	15		4.481	(78,600.00)
Commodity Swap Transaction	14883			4.045	(13,200.00)
Commodity Swap Transaction	15036 45	-1.7		4.150	(38,600.00)
Commodity Swap Transaction	15115 45-	1.11		3.924	9,900.00
Commodity Swap Transaction	15428 45-	1.15		4.512	(166,500.00)
Commodity Swap Transaction	15129			5-1.19	(5,980.00)
Commodity Swap Transaction	15200 45			3.805	22,800.00
Commodity Swap Transaction	15228 45	1.1.		3.908	9,800.00
Commodity Swap Transaction	15183	1.1		3.8000	47,100.00
Commodity Swap Transaction	15207 V	1.7		5-1-12 1 3.8100	22,050.00
Commodity Swap Transaction	15466	1.7		1 4.1330	(52,800.00)
Commodity Swap Transaction	15464	1.2		15-122 4.1300	(39,790.00)
Commodity Swap Transaction	15419 95	1.7		4.4820	(157,500.00)
Commodity Swap Transaction	15429 Y >	~ 7		4.5150	(167,400.00)
Commodity Swap Transaction	15037 4>	2		4.1450	(31,960.00)
Commodity Swap Transaction	15369	-1.3		4.4050	(26,880.qp)
Commodity Swap Transaction	15418 4.3	1.2		4.4830	(157,800.00)
Commodity Swap Transaction	15478	-1. 5		3.9580	(200.00)
Commodity Swap Transaction	15155 YS	-1.3		1>-1-3.7520	61,500.00
Commodity Swap Transaction	15194	1. 3		5-1.59	22,050.00
Commodity Swap Transaction	15474 45	-1.		3.9580	(200.00)

# . CONFIDENTIAL

SOURCE As Referenced

45

.

the apple

## REDACTED

Tampa Electric Company **Hedging Audit** Docket No.150001-EI Period Ended July 31, 2015 Control No. 15-051-2-2

## Auditor: Intesar Terkawi

File Name: Hedging Transactions

Transaction Instrument	Transaction Number	Volume	Market Price	Settlement Price	Gain/loss on Hedging Transactions
October Transactions				1	
	15	-2-1	UI	45-2-11	(AL)
Commodity Swap Transaction	15116			3.9430	12,300.00
Commodity Swap Transaction	15050 45-	4.9		4.1250	(21,150.00)
Commodity Swap Transaction	14936 45-	25	H THERE	4.1340	(19,500.00)
Commodity Swap Transaction	15051 45-2	. 8		5-2-6 4.1100	(15,120.00)
Commodity Swap Transaction	15208 N S2	. 12	4	5-2-9 3.8200	24,600.00
Commodity Swap Transaction	14905	1.0		5-2-12 4.2080	(31,360.00)
Commodity Swap Transaction	15465	17		4.1350	(45,300.00)
Commodity Swap Transaction	15504 45-2.	IS		3.7810	60,900.00
Commodity Swap Transaction	15131 15 - 4	11		4.0275	(13,050.00)
Commodity Swap Transaction	15201 45 -2	19	Y AND Y	3.8250	23,850.00
Commodity Swap Transaction	15225 45-2	.20	4	5-7:20	6,400.00
Commodity Swap Transaction	15477 45-2	24		5-2.23	4,500.00
Commodity Swap Transaction	15506	2		45-2-23	60,900.00
Commodity Swap Transaction	15378 15 -6			4.6770	(97,020.00)
Commodity Swap Transaction	14907 45 -2	-20	the second second	4.2050	(44,200.00)
Commodity Swap Transaction	15479 45-2	30	Y	5-2-39.9690	4,500.00
Commodity Swap Transaction	15156 45-6	Ť	1.	5-2.323.7740	63,000.00
Commodity Swap Transaction	15195 75-2		Y	5-2-343.8290	23,250.00
Commodity Swap Transaction	15475 45-2	3-	1	5-2-353.9700	4,200.00
Commodity Swap Transaction	15184 45-2		1	5-2-39.8180	41,500.00

# CONFIDENTIAL

SOURCE As Referenced

\*

q

45.1

Workpaper page numbers 45-11 through 45-2.38 have been redacted.

Tampa Electric Company Review of Hedging Activities Docket # 150001-El Audit Request 6

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2 Subject: Accounting Treat man

1. A narrative describing the manner of how accounting treatment from futures, options and swap contracts between TECO and counterparties are consistent with Order No. PSC-02-1484-FOF-EI, in Docket No. 011605-EI, issued October 30, 2002, and clarified by Order No. PSC-08-0316-PAA-EI.

To comply with PSC Order PSC-02-1484 and FERC's new requirements on Derivative Instrument Accounting, and to capture changes in the fair market value of derivative instruments based on FAS 133, Tampa Electric created new accounts based on FERC's addition of new balance sheet accounts to the Uniform System of Accounts. These accounts were used to capture all gains and losses as well as unsettled position balances.

### FERC Account Numbers:

1 .....

![](_page_40_Picture_5.jpeg)

## **Unrealized Gain**

Acct. #	Legacy Account Description
	DEF DR - DERIVATIVE ASSET
17601	- S
	DEF DR-DERIVATIVE ASSET-
17604	L/T
21901	OCI - DERIVATIVE GAIN/LOS\$
	OCI - REGULATORY
21902	DERIVATIVE G
	DIT ST - DEFERRED
19041	DERIVATIVE
	DIT FD - DEFERRED
19042	DERIVATIVE
	DEF CR - REG DERIVATIVE
24502	LIABI
12112-0212	DEF CR - REG DERIVATIVE
24505	LIABI
	DIT ST - DEFERRED
28341	DERIVATIVE
	DIT FD - DEFERRED
28342	DERIVATIVE

SAP Acct. #	SAP Account Description
1760100	Current Derivative Asset
1760200 2190000	Long-Term Derivative Asset Comprehensive Income - Other Pretax
2190000	Comprehensive Income - Other Pretax
1900406	Deferred Tax SIT - FAS 133
1900306	Deferred Tax FIT - FAS 133
2540105	Current Derivative Liability - Regulatory
2540205	Regulatory
2830440	DIT Liab-FAS 133 - State
2830340	DIT Liab-FAS 133 - Federal

SOURCE

26-1

## Unrealized Loss

Legacy Acct. #	Legacy Account Description	SAP Acct. #	SAP Account Description
17602	DEF DR - REG DERIVATIVE ASSET DEF DR-REG DERIVATIVE	1823105	Current Derivative Asset - Regulatory Long-Term Derivative Asset -
17605	ASSET -	1823205	Regulatory
21901	OCI - DERIVATIVE GAIN/LOSS DIT ST - DEFERRED	2190000	Comprehensive Income - Other Pretax
19041	DERIVATIVE DIT FD - DEFERRED	1900406	Deferred Tax SIT - FAS 133
19042	DERIVATIVE DEF CR - DERIVATIVE	1900306	Deferred Tax FIT - FAS 133
24501	LIABILITY DEF CR - DERIVATIVE	2450100	Current Derivative Liability
24504	LIABILITY	2450200	Long-Term Derivative Liability

## 2. Does TECO participate in any financial hedges with any of its affiliated operations?

TECO does not participate in any financial hedges with any of its affiliated operations.

However, Tampa Electric does hedge gas for both Tampa Electric (TEC) and Peoples Gas (PGS), a division of Tampa Electric. Since PGS is a division of TEC, they are viewed the same credit entity by the financial community.

The transactions are separated when they are entered into Nucleus, our deal entry system. Each entity has a separate portfolio which keeps the costs and transactions separated.

1

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2 Subject: A

232.51 SOURCE

CONFIDENTIAL

46-2

## Tampa Electric mary of Natural Gas Hedge Volumes Relative to Actual Consumption August, 2014 - July, 2015

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2 Subject: Dudy July & Activity

Enorgend :	2 Ach of 15 1	Target Maximum	% of Actual Consumption Hedged	Above Maximum? Below Minimum?	Explanation
Aug-14	60%	80%		No	
Sep-14	60%	80%		Yes	Gas-fired generation lower than projected due to higher than projected coal-fired generation.
Oct-14	60%	80%		Yes	Gas-fired generation lower than projected due to higher than projected coal-fired generation.
Nov-14	60%	80%		Yes	Gas-fired generation lower than projected due to higher than projected coal-fired generation.
Dec-14	60%	80%		Yes	Gas-fired generation lower than projected due to higher than projected coal-fired generation.
Jan-15	60%	80%		Yes	Gas-fired generation higher than projected due to lower than projected coal-fired generation.
Feb-15	60%	80%		Yes	Gas-fired generation higher than projected due to lower than projected due to lower
Mar-15	60%	80%		Yes	Gas-fired generation higher than projected due to lower than projected coal-fired generation.
Apr-15	60%	80%		Yes	Gas-fired generation higher than projected due to lower than projected coal-fired generation.
May-15	60%	80%		Yes	Gas-fired generation higher than projected due to lower than projected coal-fired generation.
Jun-15	60%	80%		Yes	Gas-fired generation higher than projected due to lower than projected coal-fired generation.
Jul-15	60%	80%		Yes	Gas-fired generation higher than projected due to lower than projected coal-fired generation.

REDACTED

SOURCE\_

DOCKET NO. 130001-EI 2014 RISK MANAGEMENT PLAN EXHIBIT NO.\_\_\_\_\_ (JBC-2) PAGE 1 OF 10

## TAMPA ELECTRIC COMPANY FUEL PROCUREMENT AND WHOLESALE POWER PURCHASES RISK MANAGEMENT PLAN

2014

#### Introduction

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-ELACN 15-051-2-2 Subject: A Inal & Budglad

CONFIDENTIAL

08

Tampa Electric serves its retail customers' electricity needs through a portfolio or generation and wholesale purchases. Tampa Electric's generation fuel mix is primarily a blend of coal and natural gas. While fuel mix diversity enhances long-term reliability, the reliance on natural gas can potentially increase variation in fuel prices. The company's risk management activities reduce the impact of price uncertainty and volatility to the Fuel and Purchased Power Cost Recovery Clause.

## I. Qualitative and Quantitative Risk Management Objectives

## A. Qualitative objectives

Tampa Electric's goals in managing risks associated with fuel or power purchases are focused on minimizing supply risk to ensure reliability of electric service to its customers at a reasonable price. To the extent price risk can be reduced without compromising supply reliability or imposing unnecessary costs on customers, Tampa Electric is committed to executing strategies to accomplish its risk management goals.

## B. Quantitative objectives

Tampa Electric's quantitative objective is to prudently manage its fuel and wholesale energy procurement activities to minimize the variance from projected lexpenditures 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.

## II. Oversight & Reporting of Fuel Procurement Activities

The company provides fuel and wholesale energy procurement activities with independent and unavoidable oversight.

A. The TECO Energy Board of Directors established an Energy Risk Management Policy ("Risk Policy"). This policy governs all energy commodities transacting activities at each of TECO Energy's operating units. The scope of this policy includes:

SOURCE

57.1

1

DOCKET NO. 130001-EI 2014 RISK MANAGEMENT PLAN EXHIBIT NO.\_\_\_\_\_ (JBC-2) PAGE 2 OF 10

- Roles and responsibilities of various persons and functions with respect to risk management
- Authorized transacting activity
- Risk limits
- Valuation and data management
- Credit risk management
- Reporting
- Compliance and enforcement

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-ELACN 15-051-2-2 Subject: A Jun & Budgeled

- B. The Risk Policy established the Risk Advisory Committee ("RAC"). The responsibilities of the RAC include the following activities:
  - Reviewing the Risk Management Policy periodically and recommending changes and enhancements for approval by the Board of Directors ("Board").
  - Reviewing corporate risk limits for recommendation to the Board.
  - Establishing the quantitative limits for operating companies within Board approved corporate risk limits. The RAC may, at its discretion, delegate approval of sub-limits to operating company management.
  - Approving parameters for counterparty credit limits and the allocation of limits among the operating companies.
  - Establishing guidelines for risk management and measurement.
  - Overseeing and reviewing the risk management process and infrastructure.
  - Reviewing and approving transacting strategies proposed by the operating companies.
  - Understanding and approving methodologies used for valuation and risk measurement.
  - Reviewing and approving corporate and operating company risk limits.
  - Establishing credit underwriting standards, and monitoring credit risktaking activities and related exposures.
  - Reviewing risk reports, including portfolio risk summaries and profitability and performance summaries.
  - Enacting, maintaining, and enforcing limit violation and trader misconduct policies.
  - Taking appropriate courses of action when the risk position of a transacting group has exceeded or is approaching the established limits.
  - Reviewing and approving new risk management products.
  - Presenting periodic reports to the Board or its committees.
- C. TECO Energy established a corporate risk management function ("middle office"), which is overseen by the Director of Independent Risk Oversight.
- D. Tampa Electric established additional oversight or control mechanisms to ensure compliance with policies and procedures. The following practices

SOURCE\_

CONFIDENTIAL

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-ELACN 15-051-2-2 Subject: A Flored & Budgeby

DOCKET NO. 130001-EI 2014 RISK MANAGEMENT PLAN EXHIBIT NO.\_\_\_\_\_ (JBC-2) PAGE 3 OF 10

provide checks and balances on fuel and purchased power procurement activities.

- Fuel and wholesale energy procurement activities are conducted in accordance with company guidelines, including review by the operating stations and other management.
- All agreements are formalized in a written contract that is reviewed by legal counsel.
- The contracts are reviewed by the Director, Independent Risk Oversight of TECO Energy's Energy Risk Management Department for potential credit risks and incorporation of appropriate credit protection.
- The company maintains approval authority restrictions based on term and value of the transaction.
- Payments of invoices under each contract are settled and approved by an independent department.
- Each transaction is eligible for review by outside, internal and regulatory auditors.
- Information systems provide transaction authority control, credit monitoring, mark-to-market and value-at-risk analysis and other key controls.
- E. In accordance with the Risk Policy, Tampa Electric established commontate specific transaction limits for commodity transactions.
  - The Risk Authorizing Committee reviews and approves commodity transaction limits on an individual basis.
  - The limits include commodity, physical or financial, tenor (time limit), and dollar amount.
  - Only a few individuals are authorized to execute financial hedging transactions.
- F. Tampa Electric's Fuels Management Department has updated and formalized its policies and procedures. The key elements of its policies and procedures are:
  - Financial hedging of fuel commodities are for mitigation of risk to fuel price uncertainty and volatility.
  - Hedging will be conducted in a manner consistent with the Risk Management Plan approved by the RAC.
  - Execution of hedges under the Risk Management Plan will be consistent with approved transaction limits for authorized transactors.
  - Duties will be separated to assure sufficient control over hedging transactions.
  - Hedging activity will be monitored regularly and reported at least once a month to insure consistency with the Risk Management Plan.
- G. Reports are generated that summarize the fuel procurement activities of the company. These include monthly financial reports produced by Regulatory Accounting, FERC Electric Quarterly Reports, FERC Form 1,

SOURCE

57.3

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No, 150001-El ACN 15-051-2-2 Subject: A.Jun 2 Budo

DOCKET NO. 130001-EI 2014 RISK MANAGEMENT PLAN EXHIBIT NO.\_\_\_\_\_ (JBC-2) PAGE 4 OF 10

FERC Form 580, FERC Form 923, FERC Form 552, FPSC Form 423, FPSC A schedules and FPSC E schedules. In addition, position and markto-market reports are produced and reviewed by the Director of Independent Risk Oversight. The appropriate entries and related disclosures are made in the company's books and records as required by accounting standards.

#### III. Risk Assessment

In its Risk Policy, TECO Energy has identified the following types of risks for its commodity portfolio.

A. Market Risk

![](_page_46_Picture_6.jpeg)

Market risk is the potential change in value of a commodity contract caused by adverse changes in market factors (price and volatility). The following are types of market risk.

 Price Risk: Price risk refers to the uncertainty associated with changes in the price of an underlying asset. For instance, if a company has a short position in the market (e.g., needs to meet load requirements by purchasing electricity or natural gas), it will be susceptible to price increases. Conversely, if a company is in a long position (e.g., excess generation or natural gas supply), it is exposed to decreases in market prices. Tampa Electric manages its price risk using physical and financial hedges.

In 2014, Tampa Electric is subject to limited price risk related to variation in coal prices. That price risk is mitigated in part because the company has already contracted for much of its expected coal needs at known prices. Expected market conditions do not currently require further price risk mitigation, for the reasons described in Section IV of this plan.

Tampa Electric evaluated its exposure to changes in the price for natural gas during 2014 based on the forward price and estimated uncertainty in the price of natural gas and the company's expected usage under both low and high price natural gas cases. Natural gas expenditures decrease in the low case by an estimated \$40.0 million and total fuel and purchased power costs decrease by \$68.5 million due to lower prices. In the high case, natural gas expenditures increase by an estimated \$75.2 million, and the total fuel and purchased power costs increase by \$52.6 million. This exposure estimate does not take into account any hedges the company may implement to limit its exposure. Tampa Electric's

URCE

L

ł

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2 Subject: A Ernal & Bradgeled DOCKET NO. 130001-EI 2014 RISK MANAGEMENT PLAN EXHIBIT NO.\_\_\_\_\_ (JBC-2) PAGE 5 OF 10

 $\circ \circ J^{L}$  in strategy with respect to natural gas and purchased power  $\mathcal{T}$  is outlined in Section IV of this plan.

Tampa Electric requires small quantities of fuel oil and maintains a contract that eliminates its supply risk. Due to the small quantities of fuel oil needed for generation, the cost impact caused by price risk is minimal and is therefore not quantified.

- 2. Time Spread Risk: This is the risk that the relationship between two points (i.e., one month versus six months) on the forward curve changes. Because the shape of the fuel or electricity forward curve changes to reflect the market's expectations of spot and future fuel or electricity prices, the relationship between any two points on the curve is not always constant. Because of the nature of its business Tampa Electric has little reason or opportunity to offset energy commodity requirements in one month with resources delivered in another month. Therefore, time spread risk is not a significant issue for Tampa Electric.
- Liquidity Risk: 3. Liquidity risk is ass the lack of marketability of a commodity. It includes the risk of an adverse cost or return variation stemming from the lack of marketability of a financial instrument. Liquidity risk may arise because a given position is very large relative to typical trading volumes of like commodity and contract tenor, or because market conditions are unsettled. Liquidity risk is usually reflected in a wide bid-ask spread and large price movements in response to any attempt to buy or sell. A firm facing the need to quickly unwind a portfolio of illiquid instruments may find it necessary to sell at prices far below fair value. Tampa Electric is not exposed to liquidity risk for natural gas financial instruments since the company does not purchase instruments for resale. Tampa Electric does have some liquidity risk for wholesale power transactions since the Florida market has a limited number of participants. 1
- 4. Basis Risk: Basis risk is the risk exposure due to a difference in commodity value between different delivery points. Electricity markets are regional. Prices can be different at different locations because of differences in both supply costs and the cost of transmission between the two locations. These price differences are dynamic, primarily due to changes in transmission availability between the two locations. Due to the stability of the coal market, Tampa Electric's negligible use of oil, and the indexing of its natural gas contract pricing, basis risk is not a significant issue for the company.

Fundamentally, market risk is created by the existence of "open"

MINCE

t

ł

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2 Subject: Adned & Budgelia

DOCKET NO. 130001-EI 2014 RISK MANAGEMENT PLAN EXHIBIT NO.\_\_\_\_\_ (JBC-2) PAGE 6 OF 10

positions.' An open position is the difference between an existing requirement and the ability to meet that requirement with existing resources.

## B. Volume Risk

Volume risk is the potential adverse economic impact of unanticipated changes in supply or demand. Tampa Electric faces supply risk, because there is uncertainty associated with the availability of generating units or fuel availability for those units. If a generating unit fails, Tampa Electric must replace the power with another unit's generation or with purchased power at market prices. Tampa Electric also faces demand risk since there is uncertainty associated with customer demand, and thus uncertainty in the determination of the fuel or energy purchase volumes necessary to supply such demand. Tampa Electric's volume risk for fuel and purchased power in 2014 will be managed operationally and through contract terms enforcement, including appropriate legal remedies, should a party default.

## C. Credit Risk

![](_page_48_Picture_6.jpeg)

۱

Credit risk is the risk of financial loss due to a counterparty's failure to fulfill the terms of a contract on a timely basis. It includes both settlement risk associated with payment for fuel or energy received, as well as the potential risk that the counterparty defaults on an obligation to provide or receive fuel or energy. Credit risk depends on the probability of counterparty default, the concentration of credit exposure with a small number of counterparties, the total amount of exposure, and the volatility of markets. Tampa Electric's credit risk will vary based on the number of its trading counterparties and the mark-to-market value of its hedge transactions. Tampa Electric's existing credit risk is minimal since it uses a wide variety of counterparties, and has systems and processes in place to monitor and control credit risk.

#### D. Administrative Risk

۱

l

Administrative risk is risk of loss associated with deficiencies in a company's internal control structure and management reporting due to human error, fraud or a system's inability to adequately capture, store and report transactions. The company has consistently maintained appropriate administrative controls for entering and administration of commodity transactions.

#### IV. Risk Management Strategy and Current Hedging Activity

Tampa Electric's risk management strategy is designed to limit exposure to different types of risk that are applicable to the company's operation.

JUNC

DOCKET NO. 130001-EI 2014 RISK MANAGEMENT PLAN EXHIBIT NO.\_\_\_\_\_ (JBC-2) PAGE 7 OF 10

CONFIDENTIAL

## A. Market Risk

Tampa Electric's potential market risk is the result of open positions in four commodities:

- Coal
- Natural Gas
- Hedging Activities
- Fuel Oil
- 08/01/2014 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2

Purchased Power

System energy requirements during 2014 are projected to be served in the proportions shown in the following table.

Subject: Actual & Budge

Commodity	Percent of System Energy
Coal	59
Natural Gas	37
No. 2 Oil	0
No. 6 Oil	0
Purchased Power	4

Based on Tampa Electric's assessment of market risk factors, the company has implemented the market risk management strategies described below.

- 1. Coal: Tampa Electric has contracted for much of its expected coal needs for 2014 through bilateral agreements with coal producers. The company will provide the projected amounts in both tons and dollars in its 2014 projection filing to be submitted August 30, 2013. Coal market pricing has retreated from record high levels in 2008. In 2013, coal prices have been relatively stable, and prices are expected to remain stable in 2014. Tampa Electric has secured a portion of its coal needs for 2014, reducing exposure to price volatility and mitigating coal volume risk. Tampa Electric's contracts with suppliers also incorporate legal remedies in the event of default, which address volume risk.
- 2. Fuel Oil: In 2014, Tampa Electric will continue to purchase its fuel oil needs at indexed market prices. Oil represents less than one percent of the company's needs on a GWH basis, and therefore, associated price impact from risk is minimal. Tampa Electric maintains a contract with a local supplier to deliver all of its needs, which mitigates supply risk.

10

SOURCE

1

57.8

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-212 Subject: Ached & Brazeleg &

DOCKET NO. 130001-EI 2014 RISK MANAGEMENT PLAN EXHIBIT NO.\_\_\_\_\_ (JBC-2) PAGE 8 OF 10

3. Natural Gas: Tampa Electric continues to implement prudent financial hedging strategies for natural gas requirements. In 2013, the company used swap agreements—the exchange of a payment tied to the value of a natural gas index for a fixed payment—to hedge natural gas. In keeping with the company's approved risk management plan, Tampa Electric plans to hedge a significant percentage of its projected natural gas usage in 2014.

Tampa Electric uses the forward pricing information of the New York Mercantile Exchange ("NYMEX") natural gas forward price curve in developing natural gas price hedging strategy. Tampa Electric also subscribes to industry publications that provide information about underlying issues affecting the availability and price of natural gas and other commodities. The purpose of Tampa Electric's natural gas hedge plan is to reduce natural gas price volatility by utilizing financial instruments relying on three key variables: price, volume and time.

Tampa Electric projects prices during the company's annual fuel budgeting process. The volume of natural gas that the company will hedge falls between a minimum and a maximum percentage of the expected natural gas burn. The percentages vary according to the time remaining until the contract month.

## CONFIDENTIAL

l

1

Tampa Electric's approved Risk Management Plan describes the following key elements of the company's natural gas hedging strategy: (1) natural gas prices can be hedged up to 24 months into the future; (2) nearer months can be hedged for a greater percentage of the expected volume than outer months; and (3) natural gas options can be used for financial hedging.

Currently, Tampa Electric estimates about percent of its total 2013 natural gas purchases will be covered by financial hedges. The net effect of these hedges is estimated to be a state of approximately percent hedged with a currently estimated percent of

4. Purchased Power: Total forecasted purchased power for 2014 is 713 GWH. As of July 2013, Tampa Electric has physically hedged 328 GWH's of its 2014 expected purchased power needs through pre-scheduled purchased power agreements. The remaining GWH's of 2014 forecasted wholesale energy purchases will be purchased from as-available cogenerators or on the short-term, non-firm market for economy purposes, which are not hedged.

SOURCE

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-ELACN 15-05 Subject: Actual & Budge

DOCKET NO. 130001-EI 2014 RISK MANAGEMENT PLAN EXHIBIT NO.\_\_\_\_\_ (JBC-2) PAGE 9 OF 10

57,10

The company's purchased power contracts include a fuel component; therefore, Tampa Electric has exposure to fuel price risk for its wholesale energy purchases, particularly for purchased power supplied from natural gas-fired generation. Tampa Electric does not currently hedge wholesale energy transactions with financial instruments due to the lack of a liquid, published wholesale energy market and appropriate available instruments.

Tampa Electric is responsible for natural gas fuel delivery on two purchase contracts for peaking power. Although this contract volume is not currently included in the company's hedging portfolio, Tampa Electric continually assesses whether it should be added.

In summary, Tampa Electric's planned operations in 2014 result in nominal market risk associated with coal and fuel oil. Non-price risks associated with natural gas and purchased power are also minimal. Therefore, while the company continues to evaluate risk for all fuel and energy commodity transactions, it is currently focused on mitigating the price risk associated with natural gas and purchased power.

- Volume Risk: Hedging of volumetric risk is problematic due to a limited number of viable financial hedging instruments. Tampa Electric has identified the following hedges.
  - Maintaining appropriate inventory stockpiles provides a physical hedge against volume risk.
  - "Swing" contracts enable the buyer to take variable volumes up to a predefined limit.
  - Full requirement contracts enable the buyer to take any volume up to total usage.

Tampa Electric uses inventory swing contracts and full requirements contracts where needed commodity volumes are small and in situations where commodity volumes are unpredictable in volume and/or timing. Other alternatives will continue to be identified, assessed and implemented as necessary.

- Credit Risk: TECO Energy's credit risk management process is composed of the following primary steps.
  - Gather counterparty information for initial evaluation.
  - Assess counterparty creditworthiness and assign credit limit.
  - Determine credit collateral requirements, as needed.
  - Request, review and monitor contractual requirements, legal covenants, collateral documents and credit provisions.
  - Quantify counterparty exposure and measure against approved limits.

Monitor counterparty and credit support provider qualities.

CONFIDENTIAL

![](_page_52_Figure_0.jpeg)

## 2.4. Front Office

# CONFIDENTIAL

Front Office management has the primary responsibility for managing risks for the individual operating companies. In executing risk management activities, they must seek the advice and involvement of qualified individuals for issues related to areas beyond the unit's expertise. For example, certain sources of risk, such as credit, tax, accounting, and legal/regulatory, give rise to a high degree of reliance on persons with specialized knowledge.

![](_page_53_Picture_0.jpeg)

- 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.

![](_page_53_Picture_10.jpeg)

58.2

## 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.

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.

SOURCE

Energy Risk Management Policy

![](_page_54_Picture_26.jpeg)

Tampa Electric Company Hedging Activities 08/01/2014 - 07/31/2015 Docket No. 150001-EI ACN 15-051-2-2 Subject: Daties Seperation 08/15

IT