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STEVE CRISAFULLI
Speaker of the House of Representatives

September 23, 2016

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

Re: Docket No. 160001-EI

Dear Ms. Stauffer,

Please find enclosed for filing in the above referenced docket the Direct Testimony and Exhibits of **Tarik Noriega**. This filing is being made via the Florida Public Service Commission's Web Based Electronic Filing portal.

If you have any questions or concerns; please do not hesitate to contact me. Thank you for your assistance in this matter.

Sincerely,

Erik L. Sayler
Associate Public Counsel

ELS:bsr
cc: All Parties of Record

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor	)))))	DOCKET NO. 160001-EI FILED: September 23, 2016

DIRECT TESTIMONY AND EXHIBITS

OF

TARIK NORIEGA

ON BEHALF OF THE

OFFICE OF PUBLIC COUNSEL

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Exhibits

DIRECT TESTIMONY

OF

TARIK NORIEGA

On Behalf of the Office of Public Counsel

Before the

Florida Public Service Commission

Docket No. 160001-EI

I. <u>EDUCATIONAL BACKGROUND AND EXPERIENCE</u>

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Tarik Noriega. My business address is 111 W. Madison St., Suite 812, Tallahassee, FL 32399-1300.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Office of Public Counsel ("OPC") as an Economist.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. I graduated from the University of Central Florida with a Bachelor of Arts ("B.A.") degree in Economics in 1992. I also earned a Master of Arts in Applied Economics ("M.A.A.E.") degree from the University of Central Florida in 1994.

Q. PLEASE DESCRIBE YOUR WORK EXPERIENCE.

A. I have nearly 20 years of experience as an Economist and Policy Analyst. Between

1996 and 2012, I was employed by the Florida Public Service Commission ("PSC" or "Commission"), the Florida House of Representatives, and the Florida Department of Revenue. Since 2012, I have been working for OPC, where I provide analysis and technical support in rate cases and other docketed and undocketed matters before the PSC on behalf of Florida's utility customers.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN PROCEEDINGS BEFORE THE COMMISSION?

A. Yes, I provided testimony in Docket No. 150001-EI, which was the 2015 Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor Docket ("Fuel Adjustment Clause" or "Fuel Docket").

II. TESTIMONY OVERVIEW

Q. ON WHOSE BEHALF ARE YOU FILING TESTIMONY IN THIS PROCEEDING?

A. I am testifying on behalf of OPC and the customers served by the four largest Florida investor-owned electric utilities ("IOUs" or "Companies").

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony in this proceeding is to provide factual testimony related to the history of the fuel clause, mid-course corrections, and hedging programs. I also provide the results of the IOUs' hedging programs since 2002. Another OPC witness, Mr. Daniel J. Lawton, addresses some of the economic and regulatory policy issues surrounding the Companies' proposals to continue their natural gas financial hedging programs, as described in their 2017 Risk Management Plans. In addition, Mr. Lawton's testimony addresses the potential impacts of the Companies' hedging proposals on consumers, if approved by the Commission.

Q. WHAT MATERIALS DID YOU REVIEW AND RELY UPON FOR YOUR TESTIMONY?

A. I reviewed the following materials for this year's Fuel Docket: (1) my 2015 Fuel Docket testimony and supporting documentation; (2) past hedging true-up filings with the PSC in the Fuel Adjustment Clause by Duke Energy Florida ("Duke"), Florida Power & Light Company ("FPL"), Gulf Power Company ("Gulf"), and Tampa Electric Company ("TECO"); (3) these Companies' discovery responses related to hedging; (4) prior Commission Fuel Adjustment Clause orders and hedging orders; and (5) other information available in the public domain. I did not review any discovery responses or past hedging filings by Florida Public Utilities Company ("FPUC") because that utility does not hedge natural gas. When relying on various sources, I have referenced such sources in my testimony and/or attached these sources as Exhibits.

Q. WHAT IS THE PERIOD THAT YOU REVIEWED IN EVALUATING THE COMPANIES' NATURAL GAS HEDGING FILINGS?

A. I reviewed data for calendar years 2002 through 2017. The Companies have provided actual numbers through July 31, 2016 and projected numbers thereafter.

Q. DO YOU SPONSOR ANY EXHIBITS IN SUPPORT OF YOUR TESTIMONY?

A. Yes, I am sponsoring three Exhibits. Exhibit No. ____ (TN-1) includes my résumé and is titled "Résumé of Tarik Noriega". Exhibit No. ____ (TN-2) includes the actual hedging program results and is titled "IOU Natural Gas Hedging Gains/(Losses) From 2002-2015". Exhibit No. ____ (TN-3) includes discovery responses from the Companies and is titled "IOU Discovery Responses".

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. In Section III of my testimony, I address the history of the Fuel Adjustment Clause in Florida, including a brief overview of mid-course corrections.

Section IV provides a general overview of fuel price hedging and the PSC's 2002 and 2008 Hedging Orders.

Section V addresses my observations regarding the IOUs' natural gas hedging gains and losses since 2002, natural gas price trends, and recent IOU hedging program projections.

Section VI provides my conclusion.

III. FUEL ADJUSTMENT CLAUSE BACKGROUND

Q. WHAT IS THE FUEL ADJUSTMENT CLAUSE?

A. The Fuel Adjustment Clause is a mechanism used by the Commission that allows the IOUs to recover "[p]rudently incurred fossil fuel-related expenses...."[1]

The origin, purpose, and history of the Fuel Adjustment Clause are thoroughly discussed in two Commission orders: Order No. 6357, issued November 26, 1974, in Docket No. 74680-CI, In re: General Investigation of Fuel Adjustment Clauses of Electric Companies; and Order No. PSC-11-0080-PAA-EI, issued January 31, 2011, in Docket No. 100404-EI, In re: Petition by Florida Power & Light Company to Recover Scherer Unit 4 Turbine Upgrade Costs Through Environmental Cost Recovery Clause or Fuel Cost Recovery Clause. Order No. 11-0080 summarized the Fuel Adjustment Clause as follows:

> The fuel [adjustment] clause is a regulatory tool designed to pass through to utility customers the costs associated with fuel purchases. The purpose is to prevent regulatory lag, which occurs when a utility incurs expenses but is not allowed to collect offsetting revenues until the regulatory body approves cost recovery. Regulatory lag has historically been a problem for utilities because of the volatility of fuel costs. ... Different states have addressed volatile fuel costs and the problem of regulatory lag in differing ways. Several jurisdictions, like Florida, have allowed recovery of fuel costs in a fuel adjustment clause, and in Florida the implementation of the fuel clause has changed and developed over the years.[2]

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[1] Order No. 14546, issued July 8, 1985, in Docket No. 850001-EI-B, In re: Cost Recovery Methods for Fuel-Related Expenses, p. 2.

[2] Order No. PSC-11-0080-PAA-EI, issued January 31, 2011, in Docket No. 100404-EI, In re: Petition by Florida Power & Light Company to Recover Scherer Unit 4 Turbine Upgrade Costs Through Environmental Cost Recovery Clause or Fuel Cost Recovery Clause, p. 6. *See also* footnote No. 15 of this Order for an additional description of the purpose of the Fuel Adjustment Clause, p. 8.

Q. ARE UTILITIES ALLOWED TO PROFIT ON THE FUEL COSTS RECOVERED THROUGH THE FUEL ADJUSTMENT CLAUSE?

A. No. As recognized in Order No. 6357, issued in 1974,"[i]t should be emphasized that a utility does not make a profit on its fuel costs."[3]

Q. WHEN DID THE COMMISSION BEGIN AUTHORIZING FUEL COST RECOVERY?

A. The practice of allowing cost recovery through a fuel adjustment mechanism began in the mid-1920s, predating the Commission's jurisdiction over regulated electric utilities, and has evolved over the past nine decades.[4]

Q. PLEASE DESCRIBE THE EVOLUTION OF THE FUEL COST RECOVERY PROCESS OVER TIME.

A. Utilities benefited from a monthly fuel adjustment mechanism from 1925 to 1951, prior to the PSC's oversight of regulated electric utilities. After the Legislature granted the Commission jurisdiction over regulated electric utilities in 1951, the utilities applied a Commission-approved formula and placed the resulting fuel charge on customers' bills. The Commission staff performed some auditing functions; however, no formal public hearing was held.[5]

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[3] Order No. 6357, issued November 26, 1974, in Docket No. 74680-CI, In re: General Investigation of Fuel Adjustment Clauses of Electric Companies, p. 2.

[4] *See* Order No. 6357 at 2; *see also* Order No. PSC-11-0080-PAA-EI at 6.

[5] Order No. PSC-11-0080-PAA-EI at 6.

That fuel adjustment mechanism changed in 1974 when customers became increasingly concerned over increased fuel charges as a result of the Organization of Petroleum Exporting Countries' ("OPEC's") oil embargo, which substantially increased the cost of oil.[6] Following an Attorney General Opinion which stated "that the practice of allowing changes in the fuel adjustment charges without a public hearing was illegal under Florida law…." (*See* 74 Op. Att'y. Gen. Fla. 309 (1974)), the Commission held its first fuel adjustment clause hearing.[7] At this hearing, a stipulation was approved that provided for a monthly hearing for all fuel adjustment clauses.[8] During the same 1974 proceeding, the Commission considered a recommendation on how to modify the clause and, as an incentive for utilities to optimize fuel costs, implemented a two-month lag between the filing for fuel clause recovery and the Commission's decision on cost recovery.[9]

However, because the amount of work involved in reviewing the information and the resulting lag time presented difficulties for the Commission, the utilities, customers, and intervenor parties alike, the Commission modified the clause once again in 1980.[10] By Order No. 9273, the Commission modified the recovery clauses to allow recovery

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[6] Id.; *see also* Order No. 6357 at 1.

[7] Order No. PSC-11-0080-PAA-EI at 6.

[8] Id.

[9] Id.

[10] Order No. 9273, issued March 7, 1980, in Docket No. 74680-CI, In re: General Investigation of Fuel Cost Recovery Clause. Consideration of Staff's Proposed Projected Fuel and Purchased Power Cost Recovery Clause with an Incentive Factor.

on the projections of future fuel and fuel-related expenditures subject to a true-up hearing, during which the utilities' projected fuel expenditures were adjusted to recover only actual expenditures.[11]

By this Order, the PSC also modified its fuel adjustment hearings by changing the hearing schedule from once a month to every six months. In justifying its rationale, the Commission stated:

> there are certain advantages to adoption of the six month perojection (sic) period, such as overcoming the seasonal peaks and valleys which would otherwise offest (sic) the attempt to arrive at a levelized charge. We therefore find that a six month projection period should be used.[12]

Once adopted, these semi-annual fuel adjustment hearings were held until 1998 when the PSC changed the frequency and timing of cost recovery hearings from semi-annual to annual.[13]

Q. WHY DID THE COMMISSION CHANGE THE FREQUENCY OF COST RECOVERY HEARINGS FROM SEMI-ANNUAL TO ANNUAL?

A. On March 17, 1998, the Commission held a workshop to receive comments from the IOUs and other interested parties regarding proposed changes to the frequency and

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[11] Id.; *see also* Order No. 9451, issued July 15, 1980, in Docket No. 800119-EU, In re: Petition of Florida Power Corporation for Authority to Increase Its Retail Rates and Charges, p. 2.

[12] *See* Order No. 9273 at 6.

[13] Order No. PSC-98-0691-FOF-PU, issued May 19, 1998, in Docket No. 980269-PU, In re: Consideration of Change in Frequency and Timing of Hearings for Fuel and Purchased Power Cost Recovery Clause, Capacity Cost Recovery Clause, Generating Performance Incentive Factor, Energy Conservation Cost Recovery Clause, Purchased Gas Adjustment (PGA) True-up, and Environmental Cost Recovery Clause, p. 13.

timing of the four cost recovery clauses.[14] On May 19, 1998, the Commission issued Order No. PSC-98-0691-FOF-PU, which changed the frequency of fuel adjustment hearings from semi-annual to its current annual schedule. In this Order, the PSC concluded:

> that all components of the fuel clause for all investor-owned electric utilities should be prospectively calculated and set on a twelve-month projected basis at annual hearings.[15]

Also, the Commission stated that this change was "in the public interest" for the following reasons: (1) an annual fuel hearing will reduce the number of hearings days per year reserved for the fuel clause; (2) mid-course corrections may occur less frequently; and (3) an annual factor will provide customers with more certain and stable prices. When discussing that mid-course corrections may occur less frequently as a result of annual Fuel Adjustment Clause proceedings, the Commission found that:

> fuel prices are currently less volatile and a higher probability exists that monthly over-recoveries and under-recoveries will be offset between annual fuel clause hearings. Hence, midcourse (sic) corrections may occur less frequently than previously surmised.[16]

Q. WHAT IS A MID-COURSE CORRECTION?

A. A mid-course correction is a mechanism set forth by a Commission rule adopted in 2010.[17] This rule requires utilities to: (a) seek a mid-course correction if there is a 10%

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[14] Id., p. 2.

[15] Id., p. 4.

[16] Id.

[17] Rule 25-6.0424, Florida Administrative Code. This rule codifies and describes the mechanism that had previously been established through incipient policy. *See* Order No. 13694, issued September 20, 1984, in Docket No. 840001-EI, In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor; In re: Purchased Gas Cost Recovery Clause.

or greater over/under-recovery in fuel cost recovery or capacity cost recovery factors, or (b) explain why a mid-course correction is not practical. However, the utilities can also request a mid-course correction without reaching the 10% threshold requiring Commission notification.[18]

Q. HOW MANY MID-COURSE CORRECTIONS DID THE COMPANIES REQUEST DURING YOUR REVIEW PERIOD?

A. To date, the IOUs have requested 17 mid-course corrections from 2002 to 2016. According to the IOUs' 2015 responses to OPC's discovery[19] and Commission Fuel Docket filings[20], FPL filed 7 mid-course corrections (4 for over-recoveries and 3 for under-recoveries), Duke requested 5 (3 for over-recoveries and 2 for under-recoveries), Gulf filed 3 (2 for over-recoveries and 1 for an under-recovery), and TECO requested 2 (1 for an over-recovery and 1 for an under-recovery) during that time period.[21]

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[18] Id.

[19] *See* FPL's response to OPC Interrogatory No. 30; Gulf's and TECO's responses to OPC Interrogatory No. 6 in Docket No. 150001-EI, In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor (*see* Exh. TN-3, pp. 1-5).

[20] *See* Order No. PSC-02-0655-AS-EI, issued May 14, 2002, in Docket Nos. 000824-EI and 020001-EI, In re: Review of Florida Power Corporation's Earnings, Including Effects of Proposed Acquisition of Florida Power Corporation by Carolina Power & Light; Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor. *See* Order No. PSC-03-0382-PCO-EI, issued March 19, 2003, in Docket No. 030001-EI, In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor. *See* Order No. PSC-08-0495-PCO-EI, issued August 5, 2008, in Docket No. 080001-EI, In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor. *See* Order No. PSC-10-0738-FOF-EI, issued December 20, 2010, in Docket No. 100001-EI, In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor. *See* Order No. PSC-16-0120-PCO-EI, issued March 21, 2016, in Docket No. 160001-EI, In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor.

[21] On July 21, 2016, TECO notified the Commission of its intent to file a mid-course correction for a projected 2016 over-recovery. However, because of the proximity to the annual Fuel Adjustment Clause proceedings and its desire to enhance rate stability, TECO proposed to postpone the implementation of this adjustment (refunds with interest) until January 2017.

IV. FUEL PRICE HEDGING

Q. HAS THE COMMISSION INDICATED ITS INTENT FOR DEVELOPING A HEDGING PROGRAM IN FLORIDA?

A. Yes. In Order No. PSC-02-1484-FOF-EI (the "2002 Hedging Order"), issued October 30, 2002, the Commission stated that:

> The Proposed Resolution of Issues establishes a framework and direction for the Commission and the parties to follow with respect to risk management for fuel procurement. It provides for the filing of information in the form of risk management plans and as part of each IOU's final true-up filing in the fuel and purchased power cost recovery docket, which will allow the Commission and the parties to monitor each IOU's practices and transactions in this area. In addition, it maintains flexibility for each IOU to create the type of risk management program for fuel procurement that it finds most appropriate while allowing the Commission to retain the discretion to evaluate, and the parties the opportunity to address, the prudence of such programs at the appropriate time. Further, the Proposed Resolution of Issues appears to remove disincentives that may currently exist for IOUs to engage in hedging transactions that may create customer benefits by providing a cost recovery mechanism for prudently incurred hedging transaction costs, gains and losses, and incremental operating and maintenance expenses associated with new and expanded hedging programs.[22]

Q. DID ANY MAJOR HEDGING DEVELOPMENTS TAKE PLACE IN 2008?

A. Yes. In 2008, FPL proposed to discontinue hedging and to replace it with an alternative mechanism.[23] There was also a sharp rise in the price of natural gas in 2008, which triggered several mid-course correction requests from the Companies for significant under-recoveries.[24]

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[22] Order No. PSC-02-1484-FOF-EI, issued October 30, 2002, in Docket No. 011605-EI, In re: Review of Investor-owned Electric Utilities' Risk Management Policies and Procedures, p. 2.

[23] *See* Petition of Florida Power & Light Company for Approval of Improved Volatility Mitigation Mechanism, filed January 31, 2008, in Docket No. 080001-EI.

[24] *See* mid-course correction filings in Docket No. 080001-EI.

Q. DID THE COMMISSION MODIFY FUEL HEDGING IN FLORIDA OR PROVIDE NEW HEDGING GUIDELINES IN RESPONSE TO THIS SHARP RISE IN THE PRICE OF NATURAL GAS?

A. Yes. In Order No. PSC-08-0667-PAA-EI (the "2008 Hedging Order"), issued October 8, 2008, the Commission established guiding principles that it recognized as appropriate to follow in reviewing plans and an IOU's hedging activities.[25] The first two guiding principles are:

> a. The Commission finds that the purpose of hedging is to reduce the impact of volatility in the fuel adjustment charges paid by an IOU's customers, in the face of price volatility for the fuels (and fuel price-indexed purchased power energy costs) that the IOU must pay in order to provide electric service.
>
> b. The Commission finds that a well-managed hedging program does not involve speculation or attempting to anticipate the most favorable point in time to place hedges. Its primary purpose is not to reduce an IOU's fuel costs paid over time, but rather to reduce the variability or volatility in fuel costs paid by customers over time.[26]

Q. ARE YOU AWARE OF ANY ORDERS THAT HAVE MODIFIED THE UNDERLYING BASIS FOR THE COMMISSION'S APPROVAL OF THE UTILITY HEDGING PROGRAMS?

A. No, I am not.

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[25] Order No. PSC-08-0667-PAA-EI, issued October 8, 2008, in Docket No. 080001-EI, In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor. Note: the Commission clarified the 2002 Hedging Order in May 2008. *See* Order No. PSC-08-0316-PAA-EI, issued May 14, 2008, in Docket No. 080001-EI. In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor.

[26] Order No. PSC-08-0667-PAA-EI, p. 16.

Q. DO ANY OF THE HEDGING ORDERS PRECLUDE ANY PARTY FROM PETITIONING FOR THE SUSPENSION OR TERMINATION OF THE FUEL HEDGING PROGRAM IN FLORIDA?

A. No, I have been advised by counsel that they do not.

V. OBSERVATIONS

Q. PLEASE SUMMARIZE YOUR OBSERVATIONS REGARDING THE COMPANIES' NATURAL GAS HEDGING GAINS AND LOSSES FOR THE PERIOD FROM 2002 TO 2015.

A. In order to ascertain the magnitude of the Companies' hedging gains or losses, I reviewed the Companies' hedging true-up filings with the Commission for every year from 2002 through 2015 and their relevant discovery responses. The filings consisted of testimonies and exhibits, which included a summary of the Companies' hedging activities and indicated whether or not the Companies achieved any gains or losses related to those hedging activities. Exhibit TN-2 provides a summary of the Companies' hedging true-up filings and shows that each of the IOUs experienced cumulative natural gas hedging losses from 2002 to 2015, which totaled $6,113,567,924 for all four Companies.

Q. WOULD YOU PROVIDE A SUMMARY OF THE GAINS AND LOSSES FROM 2002 TO 2015?

A. Yes. In the first seven years of the program (2002-2008), the Companies' hedging programs had combined net hedging losses of approximately $103 million for customers. Prior to the 2008 Hedging Order, the Commission's expectation was that gains and losses would generally offset one another over time.[27] However, during the last full seven years of the program (2009-2015), the Companies' hedging programs had combined net hedging losses of just over $6 billion. A comparison of the cumulative IOU losses experienced during these two time periods is summarized in Table 1 below:

Table 1 – Comparison of IOU Cumulative Natural Gas Hedging Gains/(Losses) From 2002-2008 and From 2009-2015

Year	Gains/(Losses) 2002-2008		Year	Gains/(Losses) 2009-2015	
2002	$	12,456,765	2009	$	(2,461,263,539)
2003	$	5,936,365	2010	$	(882,518,470)
2004	$	257,698,008	2011	$	(694,455,607)
2005	$	716,864,935	2012	$	(1,117,525,079)
2006	$	(427,767,061)	2013	$	(140,565,299)
2007	$	(902,557,336)	2014	$	106,424,864
2008	$	234,055,091	2015	$	(820,351,561)
Totals	$	(103,313,233)	Totals	$	(6,010,254,691)

Q. **WHAT HAPPENED IN 2008 AND 2009 WITH THE ECONOMY AND THE PRICE OF NATURAL GAS?**

A. The Great Recession started in 2008 and continued into 2009 and beyond. In response to the Great Recession and the influx of large volumes of shale gas obtained through hydraulic fracturing (i.e., "fracking"), the price of natural gas began to fall rapidly. As observed in 2008 data from the U.S. Energy Information Administration ("EIA"), the Weekly Henry Hub Natural Gas Spot Price (measured in Dollars per Million British

[27] Order No. PSC-08-0030-FOF-EI, issued January 8, 2008, in Docket No. 070001-EI, In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor, p. 4.

thermal units ("MMBtu")) went from a high of $13.20 on July 4, 2008 to a low of $5.41 on December 26, 2008.[28] The price of natural gas has continued to trend downward.[29] The weekly price was $3.02 as of September 16, 2016.[30] In 2009, the Companies started experiencing significant hedging losses once the price dropped because they had hedged or locked-in natural gas prices at the top of the market.

Q. WHAT ARE THE COMPANIES' 2016 ACTUAL NATURAL GAS HEDGING GAINS OR LOSSES FROM JANUARY 1 THROUGH JULY 31, 2016?

A. In their discovery responses submitted in August 2016, each of the Companies reported a natural gas hedging loss from January 1 through July 31, 2016. These losses are summarized in Table 2 below:

Table 2 – 2016 Actual Natural Gas Hedging Gains/(Losses) For IOUs From January 1 Through July 31, 2016[31]

IOU	2016 Actual Natural Gas Hedging Gains/(Losses) From January 1 Through July 31, 2016
Duke	$ (114,900,000)
FPL	$ (190,763,980)
Gulf	$ (37,505,696)
TECO	$ (17,877,735)
TOTAL	$ (361,047,411)

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[28] Weekly Henry Hub Natural Gas Spot Price (Dollars per MMBtu) available from the EIA at: https://www.eia.gov/dnav/ng/hist/rngwhhdW.htm, last checked on September 23, 2016.

[29] Id.

[30] Id.

[31] *See* Duke's, Gulf's, and TECO's Responses to OPC Interrogatory No. 11.b.; and FPL's Response to OPC Interrogatory No. 66.b. (*see* Exh. TN-3, pp. 6-26).

Q. WHAT ARE THE COMPANIES' PROJECTED NATURAL GAS HEDGING GAINS OR LOSSES FROM AUGUST 1 THROUGH DECEMBER 31, 2016?

A. In their discovery responses submitted in August 2016, each of the Companies projected a natural gas hedging loss from August 1 through December 31, 2016. These projccted losses are summarized in Table 3 below:

Table 3 – 2016 Projected Natural Gas Hedging Gains/(Losses) For IOUs From August 1 Through December 31, 2016[32]

IOU	2016 Projected Natural Gas Hedging Gains/(Losses) From August 1 Through December 31, 2016
Duke	$ (30,600,000)
FPL	$ (34,625,394)
Gulf	$ (17,063,422)
TECO	$ (583,030)
TOTAL	$ (82,871,846)

Q. WHAT ARE THE COMPANIES' PROJECTED NATURAL GAS HEDGING GAINS OR LOSSES FOR CALENDAR YEAR 2016?

A. In their discovery responses submitted in August 2016, each of the Companies projected a natural gas hedging loss for calendar year 2016. These projected losses are summarized in Table 4 below:

[32] *See* Duke's, Gulf's, and TECO's Responses to OPC Interrogatory No. 11.c.; and FPL's Response to OPC Interrogatory No. 66.c. (*see* Exh. TN-3, pp. 6-26).

Table 4 – Calendar Year 2016 Projected IOU Natural Gas Hedging Gains/(Losses)[33]

IOU	Calendar Year 2016 Projected Natural Gas Hedging Gains/(Losses)
Duke	$ (145,500,000)
FPL	$ (225,389,374)
Gulf	$ (54,569,118)
TECO	$ (18,460,765)
TOTAL	$ (443,919,257)

Q. WHAT ARE THE COMPANIES' PROJECTED NATURAL GAS HEDGING GAINS OR LOSSES FOR 2017?

A. In their discovery responses submitted in August 2016, two Companies projected natural gas hedging gains and two Companies projected natural gas hedging losses for 2017. These projected gains and losses are summarized in Table 5 below:

Table 5 – 2017 Projected Natural Gas Hedging Gains/(Losses) For IOUs[34]

IOU	2017 Projected Natural Gas Hedging Gains/(Losses)
Duke	$ (25,800,000)
FPL	$ 51,032,744
Gulf	$ (18,000,000)
TECO	$ 3,201,935
TOTAL	$ 10,434,679

[33] *See* Duke's, Gulf's, and TECO's Responses to OPC Interrogatory No. 11.a.; and FPL's Response to OPC Interrogatory No. 66.a. (*see* Exh. TN-3, pp. 6-26).

[34] *See* Duke's, Gulf's, and TECO's Responses to OPC Interrogatory No. 12; and FPL's Response to OPC Interrogatory No. 67 (*see* Exh. TN-3, pp. 6-26).

VI: CONCLUSION

Q. PLEASE SUMMARIZE YOUR CONCLUSION.

A. My conclusion is that the facts confirm that the Companies' natural gas hedging programs have resulted in losses exceeding $6 billion for Florida customers from 2002 to 2015. Also, losses are currently projected to exceed $443 million for 2016 alone. In addition, even though the Companies are collectively projecting a modest gain of about $10.4 million in 2017, this projected figure is insignificant in comparison to the billions of dollars of actual losses paid by IOU customers since the inception of the hedging program. Further, the IOUs' current 2017 projections are simply "point-in-time estimates" that are subject to change during the next 15 months.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

<u>**CERTIFICATE OF SERVICE**</u>

I HEREBY CERTIFY that a true and foregoing Direct Testimony and Exhibits of Tarik Noriega has been furnished by electronic mail on this 23rd day of September, 2016, to the following:

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EXPERIENCE

The Florida Legislature – Office of Public Counsel **Tallahassee, Florida**

Economist 2012 – Present

- Serve as an Economist for the Office of Public Counsel (OPC), where I provide analysis and technical support in rate cases and other docketed and undocketed matters on behalf of Florida's utility customers.

State of Florida – Department of Revenue **Tallahassee, Florida**

Research Economist 2011 – 2012

- Served as an Economist in the Office of Tax Research, primarily as the lead analyst in developing the documentary stamp tax and intangibles tax forecasts for the Revenue Estimating Conference (REC). Assisted in developing the ad valorem tax forecast and prepared fiscal impacts for the REC.

The Florida Legislature – House of Representatives **Tallahassee, Florida**

Economist 2008 – 2010

- Served as the Economist for the Military & Local Affairs Policy Committee and the Economic Development & Community Affairs Policy Council, primarily as the lead analyst in reviewing emergency management issues, property tax and local tax issues, libraries and historical/cultural matters, and the sunset reviews for two state agencies. Prepared bill analyses and other documents.

Economist/Budget Analyst 2006 – 2008

- Served as the Economist for the Jobs & Entrepreneurship Council and as the Budget Analyst for the Committee on Utilities & Telecommunications, primarily as the lead analyst in reviewing the budget of the Florida Public Service Commission (PSC). Provided the fiscal analysis for relevant Council and Committee legislation. Tracked REC data, analyzed economic trends, and prepared other Council and Committee documents requested by the members.

Economist 2005 – 2006

- Served as the Economist for the Finance & Tax Committee and the Fiscal Council. Prepared bill analyses and other relevant Committee and Council documents. Tracked revenues and the fiscal impacts for all legislation referred to the Council. Participated in Revenue, Economic, and Demographic Estimating Conferences, analyzed economic trends, and reviewed all relevant economic forecasts.

State Of Florida – Public Service Commission **Tallahassee, Florida**

Regulatory Supervisor/Consultant 2003 – 2005

- Served as the only agency spokesperson handling both English and Spanish media requests. Reviewed PSC staff recommendations to the Commissioners and prepared the agency's response to critical issues attracting media interest. Prepared bilingual press releases and consumer bulletins. Taped bilingual radio and television interviews.

Regulatory Analyst 1996 – 2003

- Evaluated electric utility load forecasts and reported findings and conclusions to the Commission during electric utility ten-year site plan reviews and power plant need determination proceedings. Participated in several telecommunications audits and submitted findings and conclusions to lead auditors. Responsible for the development of several energy and telecommunications policy analysis projects. Designed telephone surveys about the electric, telecommunications, natural gas, water, and wastewater industries. Evaluated all survey data and reported the findings to the Commission and to the Florida Legislature. Monitored federal issues and represented the PSC in various proceedings.

EDUCATION

University Of Central Florida (U.C.F.) – Orlando, Florida 1988 – 1994

- 1994: Master of Arts in Applied Economics (M.A.A.E.)
- 1992: Bachelor of Arts (B.A.) in Economics; Minored in Psychology and English
- Coursework focused on quantitative methods, managerial economics, and money & banking

ACTIVITIES AND HONORS

- Member of Omicron Delta Epsilon, the International Honor Society in Economics (1993-present)
- Secretary of the Provost Advisory Committee – U.C.F. (1994)
- Member of the Dean's Leadership Council – College of Business Administration – U.C.F. (1993-1994)
- President of the U.C.F. Economics Club and the U.C.F. Chapter of Omicron Delta Epsilon (1993-1994)

IOU NATURAL GAS HEDGING GAINS/(LOSSES) FROM 2002-2015

YEAR	DUKE	FPL	GULF	TECO	TOTAL ANNUAL GAINS/(LOSSES) FOR ALL 4 IOUs
2002	$ (2,098,791)	$ 14,520,306	$ 238,750	$ (203,500)	$ 12,456,765
2003	$ 19,772,126	$ (15,939,810)	$ 4,862,077	$ (2,758,028)	$ 5,936,365
2004	$ 51,068,145	$ 191,564,536	$ 6,652,157	$ 8,413,170	$ 257,698,008
2005	$ 121,672,401	$ 519,388,788	$ 22,571,976	$ 53,231,770	$ 716,864,935
2006	$ 62,066,818	$ (416,637,197)	$ (18,714,562)	$ (54,482,120)	$ (427,767,061)
2007	$ (34,399,955)	$ (799,268,428)	$ (9,197,433)	$ (59,691,520)	$ (902,557,336)
2008	$ 116,935,706	$ 100,709,736	$ (1,737,726)	$ 18,147,375	$ 234,055,091
2009	$ (556,149,474)	$ (1,660,695,829)	$ (51,232,251)	$ (193,185,985)	$ (2,461,263,539)
2010	$ (285,863,553)	$ (509,147,046)	$ (19,667,161)	$ (67,840,710)	$ (882,518,470)
2011	$ (240,882,264)	$ (404,239,340)	$ (15,444,523)	$ (33,889,480)	$ (694,455,607)
2012	$ (351,321,610)	$ (671,819,795)	$ (32,865,554)	$ (61,518,120)	$ (1,117,525,079)
2013	$ (140,907,108)	$ 18,253,045	$ (14,654,866)	$ (3,256,370)	$ (140,565,299)
2014	$ (27,741,075)	$ 116,639,265	$ 1,910,889	$ 15,615,785	$ 106,424,864
2015	$ (225,543,645)	$ (504,393,229)	$ (50,572,362)	$ (39,842,325)	$ (820,351,561)
TOTAL GAINS/(LOSSES) BY IOU FROM 2002-2015	**$ (1,493,392,279)**	**$ (4,021,064,998)**	**$ (177,850,589)**	**$ (421,260,058)**	**$ (6,113,567,924)**

Responses To Mid-course Correction Discovery

Florida Power & Light Company
Docket No. 150001-EI
OPC's 4th Set of Interrogatories
Interrogatory No. 30
Page 1 of 1

Q.

During the period 1999 through 2014:

a. In what years did the Company petition for a mid-course correction to its fuel cost recovery or capacity cost recovery factors for an over-recovery?
b. In what years did the Company petition for a mid-course correction for an underrecovery?
c. What was the percentage change to the fuel cost recovery or capacity cost recovery factor for each mid-course correction?
d. What was the root cause(s) of the request for the mid-course correction?

A.

Please see chart below for response.

(a)/(b)	(a)/(b)	(a)/(b)	(c)	(d)
YEAR	CLAUSE	MIDCOURSE TYPE	% CHANGE IN FUEL FACTOR	ROOT CAUSE
2000	Fuel	Under-recovery	23%	Increase in fuel charge due to higher than projected heavy oil price reflecting OPEC's adherence to their supply agreement
2001	Fuel	Under-recovery	25%	Increase in fuel charge due to unprecedented increase in oil and natural gas prices
2002	Fuel	Over-recovery	-8%	Decrease in fuel charge due to refund of projected over-recovery as part of settlement agreement
2003	Fuel	Under-recovery	17%	Increase in fuel charge due to higher than projected oil and natural gas prices as a result of colder than normal weather in gas burning regions of North America, lower imports of natural gas, low oil inventory in the U.S., increasing tensions in the Middle East in anticipation of a war, and unanticipated and continued oil worker's strike in Venezuela
2003	Fuel	Under-recovery	16%	Increase in fuel charge due to higher than projected natural gas and oil prices and higher than projected load
2008	Fuel	Under-recovery	29%	Increase in fuel charge due to dramatic increases in worldwide fuel oil prices
2008	Fuel	Over-recovery	-18%	Decrease in fuel charge due to downward trend in natural gas and fuel oil prices
2011	Fuel	Over-recovery	-11%	Decrease in fuel charge due to a decrease in projected 2012 natural gas prices

Citizens' First Set of Interrogatories
GULF POWER COMPANY
Docket No. 150001-EI
May 22, 2015
Item No. 6
Page 1 of 1

6. During the period 1999 through 2014:
   a. In what years did the Company petition for a mid-course correction to its fuel cost recovery or capacity cost recovery factors for an over-recovery?
   b. In what years did the Company petition for a mid-course correction for an under-recovery?
   c. What was the percentage change to the fuel cost recovery or capacity cost recovery factor for each mid-course correction?
   d. What was the root cause(s) of the request for the mid-course correction?

ANSWER:

(a-b) Year	Clause	(a-b) Recovery Position	(c) % Change	(d) Root Cause
2008	Fuel	Under Recovery	28%	Higher than estimated fuel prices.
2012	Fuel	Over Recovery	(7%)	Unexpected falling natural gas prices and unexpected 2011 over recovery for 2011 final true-up amount
2012	Fuel	Over Recovery	(21%)	Lower than expected natural gas prices and availability of firm transmission for Shell Energy PPA

TAMPA ELECTRIC COMPANY
DOCKET NO. 150001-EI
OPC'S FIRST SET OF INTERROGATORIES
INTERROGATORY NO. 6
PAGE 1 OF 2
FILED: MAY 26, 2015

6. During the period 1999 through 2014:

   a. In what years did the Company petition for a mid-course correction to its fuel cost recovery or capacity cost recovery factors for an over-recovery?

   b. In what years did the Company petition for a mid-course correction for an under-recovery?

   c. What was the percentage change to the fuel cost recovery or capacity cost recovery factor for each mid-course correction?

   d. What was the root cause(s) of the request for the mid-course correction?

A. a. During the period 1999 through 2014, Tampa Electric petitioned for a mid-course correction in the fuel and capacity cost recovery clauses in 2000, and the fuel clause in 2001, 2003 and 2009.

   b. Tampa Electric petitioned for a mid-course correction due to an under-recovery in the fuel clause in 2000, 2001, and 2003.

   c. Please see the table below for the percentage change to the fuel or capacity cost recovery factor.

Mid-Course Correction Year	Percentage Change	
	Fuel	Capacity
2000	8%	39%
2001	13%	0
2003	14%	0
2009	(21%)	0

   d. The root causes of Tampa Electric's requests for mid-course correction are described in the company's petitions for mid-course correction, which documents can be found at the following locations:

**TAMPA ELECTRIC COMPANY
DOCKET NO. 150001-EI
OPC'S FIRST SET OF
INTERROGATORIES
INTERROGATORY NO. 6
PAGE 2 OF 2
FILED: MAY 26, 2015**

2000
http://www.floridapsc.com/library/FILINGS/00/05474-00/05474-00.pdf

2001
http://www.floridapsc.com/library/FILINGS/01/01930-01/01930-01.PDF

2003
http://www.floridapsc.com/library/FILINGS/03/01866-03/01866-03.PDF

2009
http://www.floridapsc.com/library/FILINGS/09/01805-09/01805-09.pdf

Responses To Hedging Gains/(Losses) Discovery

Docket No. 150001
DEF's Amended Response to OPC's 1st Rogs (1-13)
Q2
DEF-15FL-FUEL-00267

	Natural Gas Savings (Cost)	#6 Oil Savings (Cost)	#2 Oil Savings (Cost)	River Barge/Rail Fuel Surcharge Savings (Cost)	Natural Gas Storage Savings (Cost)	Total Net Hedging Savings (Cost)
	See Note 1				See Note 1	
2002	($2,098,791)	($1,533,222)	$0	$0	$0	($3,632,013)
2003	$19,772,126	($1,229,174)	$0	$0	$0	$18,542,952
2004	$51,068,145	($758,433)	$0	$0	$0	$50,309,712
2005	$121,672,401	$70,386,665	$0	$0	$0	$192,059,066
2006	$62,066,818	$58,539,042	($1,606,710)	$0	$0	$118,999,150
2007	($34,399,955)	$18,382,023	$943,446	$0	$0	($15,074,486)
2008	$116,935,706	$106,527,933	$13,035,568	$0	$3,268,288	$239,767,495
2009	($556,149,474)	($17,029,960)	($9,937,473)	$0	($478,125)	($583,595,032)
2010	($285,863,553)	$3,400,207	$783,615	($237,316)	($13,125)	($281,930,172)
2011	($240,882,264)	$4,356,425	$3,044,674	$2,240,474	$6,750	($231,233,941)
2012	($351,321,610)	$4,456,315	$382,080	$908,953	($205,913)	($345,780,175)
2013	($140,907,108)	$0	($213,675)	($219,072)	$25,575	($141,314,280)
2014	($27,741,075)	$0	($133,341)	($594,097)	$3,225	($28,465,288)

Note 1:

DEF is revising its response to OPC's First Set of Interrogatories question 2. The Natural Gas Storage amounts have been removed from the Natural Gas Savings (Cost) totals for the years 2008 through 2014 and placed in a column called Natural Gas Storage Savings (Cost). The Total Net Hedging Savings (Cost) totals for this table have not changed. The Natural Gas Storage amounts were moved to the Natural Gas Storage Savings Cost Column and were included in DEF's original response submitted on May 26, 2015.

DUKE ENERGY FLORIDA

DOCKET NO. 160001-EI

Fuel and Capacity Cost Recovery
Final True-Up for the Period
January through December 2015

DIRECT TESTIMONY OF JOSEPH MCCALLISTER

April 6, 2016

Q. Please state your name and business address.

A. My name is Joseph McCallister. My business address is 526 South Church Street, Charlotte, North Carolina 28202.

Q. By whom are you employed and in what capacity?

A. I work for Duke Energy Progress, an affiliate company of Duke Energy Florida, LLC ("DEF" or "Company") as the Director, Natural Gas Oil and Emissions. I am responsible for the natural gas, fuel oil and emission group activities in the Fuel Procurement Section of the Systems Optimization Department for the Duke Energy regulated generation fleet. This group is responsible for the natural gas and fuel oil acquisition and transportation needed to support the generation needs for Duke Energy Indiana ("DEI"), Duke Energy Kentucky ("DEK"), Duke Energy Carolinas ("DEC"), Duke Energy Progress ("DEP"), and DEF. In addition, this group is responsible

REDACTED

Duke Energy Florida
Natural Gas and Oil Hedging Detail

Natural Gas

	Savings/(Cost) on Hedges			Hedged Volumes (MMBtu's)						
Year	Financial	Physical	Total	Financial	Physical	Total Hedged	Actual Burn (Generation & Tolling)	Hedged Burns	% Hedged with Financial	% Hedged with Physical
Jan-15	[redacted]						17,406,400	[redacted]		
Feb-15	[redacted]						14,828,800	[redacted]		
Mar-15	[redacted]						16,133,600	[redacted]		
Apr-15	[redacted]						17,874,800	[redacted]		
May-15	[redacted]						20,048,800	[redacted]		
Jun-15	[redacted]						21,810,400	[redacted]		
Jul-15	[redacted]						21,620,800	[redacted]		
Aug-15	[redacted]						22,922,800	[redacted]		
Sep-15	[redacted]						20,009,700	[redacted]		
Oct-15	[redacted]						17,867,100	[redacted]		
Nov-15	[redacted]						18,705,400	[redacted]		
Dec-15	[redacted]						18,176,800	[redacted]		
YTD	($225,543,845)	$0	($225,543,845)	130,177,500	0	130,177,500	227,058,500	61%	100%	0%

No. 2 Oil

	Savings/(Cost) on Hedges			Hedged Volumes (Gallons)						
Year	Financial	Physical	Total	Financial	Physical	Total Hedged	Actual Burn (Generation)	Hedged Burns	% Hedged with Financial	% Hedged with Physical
Jan-15	[redacted]						416,378	[redacted]		
Feb-15	[redacted]						1,364,845	[redacted]		
Mar-15	[redacted]						221,413	[redacted]		
Apr-15	[redacted]						375,413	[redacted]		
May-15	[redacted]						304,011	[redacted]		
Jun-15	[redacted]						317,903	[redacted]		
Jul-15	[redacted]						271,180	[redacted]		
Aug-15	[redacted]						501,641	[redacted]		
Sep-15	[redacted]						567,504	[redacted]		
Oct-15	[redacted]						204,807	[redacted]		
Nov-15	[redacted]						1,815,018	[redacted]		
Dec-15	[redacted]						812,713	[redacted]		
YTD	($261,097)	$0	($261,097)	504,000	0	504,000	[illegible]	7%	100%	0%

Note 1

Natural Gas Storage

	Savings/(Cost) on Hedges			Hedged Volumes (MMBtu's)						
Year	Financial	Physical	Total	Financial	Physical	Total Hedged	Actual Injections	Hedged Injections	% Hedged with Financial	% Hedged with Physical
Jun-15	$15,275	$0	$15,275	150,000	0	150,000	250,000	60%	100%	0%
YTD	$15,275	$0	$15,275	150,000	0	150,000	250,000	60%	100%	0%

Heating Oil - River Barge - Fuel Surcharge Hedges

	Savings/(Cost) on Hedges			Hedged Volumes (Gallons)						
Year	Financial	Physical	Total	Financial	Physical	Total Hedged	Estimated Exposure	Hedged Exposure	% Hedged with Financial	% Hedged with Physical
Jan-15	[redacted]						565,589	[redacted]		
Feb-15	[redacted]						573,940	[redacted]		
Mar-15	[redacted]						570,356	[redacted]		
Apr-15	[redacted]						537,900	[redacted]		
May-15	[redacted]						522,687	[redacted]		
Jun-15	[redacted]						517,576	[redacted]		
Jul-15	[redacted]						530,816	[redacted]		
Aug-15	[redacted]						534,103	[redacted]		
Sep-15	[redacted]						517,631	[redacted]		
Oct-15	[redacted]						359,213	[redacted]		
Nov-15	[redacted]						361,696	[redacted]		
Dec-15	[redacted]						452,264	[redacted]		
YTD	($845,170)	$0	($845,170)	3,278,000	0	3,278,000	6,031,436	54%	100%	0%

Heating Oil - Rail - Fuel Surcharge Hedges

	Savings/(Cost) on Hedges			Hedged Volumes (Gallons)						
Year	Financial	Physical	Total	Financial	Physical	Total Hedged	Estimated Exposure	Hedged Exposure	% Hedged with Financial	% Hedged with Physical
Jan-15	[redacted]						100,421	[redacted]		
Feb-15	[redacted]						100,964	[redacted]		
Mar-15	[redacted]						100,964	[redacted]		
Apr-15	[redacted]						100,964	[redacted]		
May-15	[redacted]						141,075	[redacted]		
Jun-15	[redacted]						120,400	[redacted]		
Jul-15	[redacted]						141,075	[redacted]		
Aug-15	[redacted]						141,075	[redacted]		
Sep-15	[redacted]						125,400	[redacted]		
YTD	($54,170)	$0	($54,170)	504,000	0	504,000	1,097,458	46%	100%	0%

Note 2

[redacted] 1: For the period of January 2015 through December 2015, based on forecasted burns for 2015, DEF fuel oil hedge percentage was approximately [redacted]. This was above the minimum hedge target of [redacted] During 2015, actual fuel oil usage was higher than forecasts which resulted in the overall lower actual hedge percentage.

Note 2: As outlined in DEF's 2015 Risk Management Plan, with respect to estimated fuel surcharge exposures in its coal rail transportation agreement, given the reduction in rail shipments during the latter part of 2015, and the expiration of the rail agreement at the end of December 2015, DEF did not estimate or hedge rail exposures for periods beyond September 2015. For the twelve-month period of August 2014 through July 2015, DEF's estimated rail surcharge hedge percentage was approximately [redacted] Also, for the period of January 2015 through September 2015, DEF's overall rail surcharge hedge percentage was approximately [redacted] which was within the target range of [redacted] o [redacted]

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Fuel and purchased power cost recovery clause with generating performance incentive factor	Docket No. 160001-EI Dated: May 23, 2016

DUKE ENERGY FLORIDA, LLC'S RESPONSES TO
CITIZENS' FIRST SET OF INTERROGATORIES (NOS. 1-10)

Duke Energy Florida, LLC ("DEF"), responds to the Citizens of the State of Florida, through the Office of the Public Counsel's ("Citizens" or "OPC") First Set of Interrogatories to DEF (Nos. 1-10), as follows:

INTERROGATORIES

1. What are the Company's cumulative natural gas hedging gains or losses from 2002 through 2015?

Answer:

DEF's cumulative natural gas hedging cost is approximately $1.493 billion from 2002 through 2015, and approximately $1.491 billion including hedging transactions for natural gas storage purchases.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Fuel and purchased power cost recovery clause with generating performance incentive factor	Docket No. 160001-EI Dated: August 22, 2016

DUKE ENERGY FLORIDA, LLC'S RESPONSE TO
CITIZENS' SECOND SET OF INTERROGATORIES (NOS. 11-18)

Duke Energy Florida, LLC ("DEF"), responds to the Citizens of the State of Florida, through the Office of the Public Counsel's ("Citizens" or "OPC") Second Set of Interrogatories to DEF (Nos. 11-18) as follows:

INTERROGATORIES

11. Natural gas financial hedging gain or loss for 2016 as of July 31, 2016:

a. Please update the projected amount of the anticipated natural gas financial hedging loss that was provided in the Company's May 2016 response to OPC Interrogatory No. 2.

Answer:

For natural gas, DEF is currently estimating a net hedge cost for calendar year 2016 of approximately $145.5 million based on July 29, 2016 closing market prices. The date of July 29, 2016 is being used to estimate as it is the last business day of the month that prices were published and July 31, 2016 is a Sunday.

b. What was the actual natural gas financial hedging loss from January 1 through July 31, 2016?

Answer:

For natural gas, DEF net hedge cost from January 1 through July 31, 2016 was approximately $114.9 million.

c. What is the estimated amount of natural gas financial hedging gain or loss from August 1 through December 31, 2016?

Answer:

For natural gas, DEF is currently estimating a net hedge cost for August 1 through December 31, 2016 of approximately $30.6 million based on July 29, 2016 closing market prices. The date of July 29, 2016 is being used to estimate as it is the last business day of the month that prices were published as July 31, 2016 is a Sunday.

d. Since the Company's May 2016 response to OPC on the projected 2016 natural gas financial hedging loss, please explain whether the 2016 projected loss has increased or decreased and by how much in terms of dollars and percentages.

Answer:

The projected 2016 natural gas financial hedge cost has decreased from the May 2016 response to OPC. DEF is currently estimating the projected 2016 natural gas financial hedging cost to decrease by approximately $29.2 million or approximately 17% from the May 2016 projection based on actual hedge cost for January 2016 through July 2016, and estimated net hedge costs for the months of August 2016 through December 2016 based on July 29, 2016 closing market price. The date of July 29, 2016 is being used to estimate as it is the last business day of the month that prices were published and July 31, 2016 is a Sunday.

12. **Projected natural gas financial hedging gains or losses for 2017 as of July 31, 2016:**

a. **Please provide the projected natural gas hedging gain or loss for calendar year 2017 based on the hedging positions the Company has already executed.**

Answer:

The estimated natural gas hedge cost for calendar year 2017 based on market prices as of July 29, 2016 is approximately $25.8 million. The date of July 29, 2016 is being used to estimate as it is the last business day of the month that prices were published and July 31, 2016 is a Sunday.

REDACTED

b. **As part of this response, what percentage of the total anticipated natural gas burn for 2017 has already been hedged?**

Answer:

As of July 29, 2016, DEF has hedged approximately [redacted] percent of its forecasted natural gas burns for calendar year 2017. The date of July 29, 2016 is being used to estimate as it is the last business day of the month that prices were published versus July 31, 2016 which is a Sunday.

Florida Power & Light Company
Docket No. 160001-EI
OPC's 1st Set of Interrogatories
Interrogatory No. 1
Page 1 of 1

Q.

What are the Company's cumulative natural gas hedging gains or losses from 2002 through 2015?

A.

The data in this answer includes both financial and physical hedges. The answer may need to be modified when the Florida Supreme Court's order in Docket SC15-95 becomes final.

FPL's natural gas hedging gains and losses from 2002 through 2015 are summarized in the attached table.

FPL HEDGING RESULTS	
	Natural Gas Gain(Loss)
2002	14,520,306
2003	(15,939,810)
2004	191,564,536
2005	519,388,788
2006	(416,637,197)
2007	(799,268,428)
2008	100,709,736
2009	(1,660,695,829)
2010	(509,147,046)
2011	(404,239,340)
2012	(671,819,795)
2013	18,253,045
2014	116,639,265
2015	(504,393,229)
TOTAL	(4,021,064,999)

Florida Power & Light Company
Docket No. 160001-EI
OPC's 3rd Set of Interrogatories
Interrogatory No. 66
Page 1 of 1

Q.

Natural gas financial hedging gain or loss for 2016 as of July 31, 2016:

a. **Please update the projected amount of the anticipated natural gas financial hedging loss that was provided in the Company's May 2016 response to OPC Interrogatory No.2.**

b. **What was the actual natural gas financial hedging loss from January 1 through July 31, 2016?**

c. **What is the estimated amount of natural gas financial hedging gain or loss from August 1 through December 31, 2016?**

d. **Since the Company's May 2016 response to OPC on the projected 2016 natural gas financial hedging loss, please explain whether the 2016 projected loss has increased or decreased and by how much in terms of dollars and percentages?**

A.

a. Based on the August 1, 2016 forward curve, FPL currently estimates hedging costs of ($225,389,374) for calendar year 2016.

b. The natural gas financial hedging results from January 1, 2016 to July 31, 2016 were a net cost of ($190,763,980).

c. Based on the August 1, 2016 forward curve, FPL currently estimates hedging costs of approximately ($34,625,394) from August 1, 2016 through December 31, 2016.

d. The Company's projected 2016 hedging cost has decreased by $83,670,156, or approximately 27% since May 2016.

Florida Power & Light Company
Docket No. 160001-EI
OPC's 3rd Set of Interrogatories
Interrogatory No. 67
Page 1 of 1

Q.

Projected natural gas financial hedging gains or losses for 2017 as of July 31, 2016:

a. **Please provide the projected natural gas hedging gain or loss for calendar year 2017 based on the hedging positions the Company has already executed.**

b. **As part of this response, what percentage of the total anticipated natural gas burn for 2017 has already been hedged?**

A.

a) Based on the August 1, 2016 forward curve, FPL currently estimates a natural gas financial hedging benefit of $51,032,744 for calendar year 2017, from transactions in place at the end of July 2016.

b) At the end of July 2016, FPL had financially hedged approximately [redacted] of the total projected natural gas burn for 2017.

Citizens' First Set of Interrogatories
GULF POWER COMPANY
Docket No. 160001-EI
Revised September 21, 2016
Item No. 1
Page 1 of 1

1. What are the Company's cumulative natural gas hedging gains or losses from 2002 through 2015?

ANSWER:

	Natural Gas Gain (loss) **$**
2002	238,750
2003	4,862,077
2004	6,652,157
2005	22,571,976
2006	(18,714,562)
2007	(9,197,433)
2008	(1,737,726)
2009	(51,232,251)
2010	(19,667,161)
2011	(15,444,523)
2012	(32,865,554)
2013	(14,654,866)
2014	1,910,889
2015	(50,572,362)
Total	(177,850,589)

Citizens' Second Set of Interrogatories
GULF POWER COMPANY
Docket No. 160001-EI
August 22, 2016
Item No. 11
Page 1 of 1

11. Natural gas financial hedging gain or loss for 2016 as of July 31, 2016:
    a. Please update the projected amount of the anticipated natural gas financial hedging loss that was provided in the Company's May 2016 response to OPC Interrogatory No. 2.
    b. What was the actual natural gas financial hedging loss from January 1 through July 31, 2016?
    c. What is the estimated amount of natural gas financial hedging gain or loss from August 1 through December 31, 2016?
    d. Since the Company's May 2016 response to OPC on the projected 2016 natural gas financial hedging loss, please explain whether the 2016 projected loss has increased or decreased and by how much in terms of dollars and percentages.

ANSWER:

a. Gulf anticipates reporting a net hedging loss for calendar year 2016 of approximately $54,569,118.

b. Gulf's actual natural gas financial hedging loss from January 1 through July 31, 2016 was $37,505,696.

c. As reported in Gulf's Estimated/Actual filed August 4, 2016, Gulf projects a $17,063,422 hedging loss for August 1 through December 31, 2016.

d. Gulf's current estimate of a natural gas hedging loss for calendar year 2016 of approximately $54,569,118 represents a $3,430,882, or 5.9%, decrease from the $58,000,000 estimate provided in Gulf's response to Citizens' first set of interrogatories in the May 2016.

Citizens' Second Set of Interrogatories
GULF POWER COMPANY
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Item No. 12
Page 1 of 1

12. Projected natural gas financial hedging gains or losses for 2017 as of July 31, 2016:
    a. Please provide the projected natural gas hedging gain or loss for calendar year 2017 based on the hedging positions the Company has already executed.
    b. As part of this response, what percentage of the total anticipated natural gas burn for 2017 has already been hedged?

ANSWER:

a. The current estimate, as of July 31, 2016, of net financial hedging loss for calendar year 2017 is approximately $18,000,000.

b. As of July 31, 2016, Gulf has hedged approximately [redacted] of the 2017 natural gas burn anticipated in its 2016 Energy Budget.

TAMPA ELECTRIC COMPANY
DOCKET NO. 150001-EI
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INTERROGATORY NO. 2
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FILED: MAY 26, 2015

2. For each of the years from 2002 through 2014, what was the annual gain or loss on each type of commodity hedged by the Company (referenced in the Company's answer to Interrogatory No. 25), as part of this response, what was the total net annual gain or loss for all the commodities hedged during that year? Please respond using a table format similar to the one below and add additional columns for hedged commodities.

	Natural Gas Gain (loss)	Oil Gain (loss)	Other Commodities Gain (loss)	Total Net Hedging Gain (loss)
2002				
2003				
2004				
2005				
2006				
2007				
2008				
2009				
2010				
2011				
2012				
2013				
2014				
Total				

A. The requested information is provided in the table on the following page. Tampa Electric does not use financial hedges for oil or other commodities.

TAMPA ELECTRIC COMPANY
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	Natural Gas Gain (loss)	Oil Gain (loss)	Other Commodities Gain (loss)	Total Net Hedging Gain (loss)
2002	($203,500)	0	0	($203,500)
2003	($2,758,028)	0	0	($2,758,028)
2004	$8,413,170	0	0	$8,413,170
2005	$53,231,770	0	0	$53,231,770
2006	($54,482,120)	0	0	($54,482,120)
2007	($59,691,520)	0	0	($59,691,520)
2008	$18,147,375	0	0	$18,147,375
2009	($193,185,985)	0	0	($193,185,985)
2010	($67,840,710)	0	0	($67,840,710)
2011	($33,889,480)	0	0	($33,889,480)
2012	($61,518,120)	0	0	($61,518,120)
2013	($3,256,370)	0	0	($3,256,370)
2014	$15,615,785	0	0	$15,615,785

TECO
TAMPA ELECTRIC

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 160001-EI
IN RE: FUEL & PURCHASED POWER COST RECOVERY
AND
CAPACITY COST RECOVERY

2015 HEDGING ACTIVITY TRUE-UP

TESTIMONY AND EXHIBIT

J. BRENT CALDWELL

FILED: APRIL 6, 2016

Tampa Electric Company
Natural Gas Hedging Activities
January 1, 2015 through December 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)	[redacted]	4,459,415	[redacted]	[redacted]	[redacted]	$3.189
Feb-15	Swaps	($3,450,145)	[redacted]	4,073,535	[redacted]	[redacted]	[redacted]	$2.866
Mar-15	Swaps	($3,338,845)	[redacted]	6,272,889	[redacted]	[redacted]	[redacted]	$2.894
Apr-15	Swaps	($3,428,830)	[redacted]	5,842,268	[redacted]	[redacted]	[redacted]	$2.590
May-15	Swaps	($4,357,580)	[redacted]	7,263,430	[redacted]	[redacted]	[redacted]	$2.517
Jun-15	Swaps	($3,356,285)	[redacted]	8,097,636	[redacted]	[redacted]	[redacted]	$2.815
Jul-15	Swaps	($3,627,895)	[redacted]	8,092,380	[redacted]	[redacted]	[redacted]	$2.773
Aug-15	Swaps	($2,610,980)	[redacted]	8,045,798	[redacted]	[redacted]	[redacted]	$2.886
Sep-15	Swaps	($3,571,100)	[redacted]	7,453,216	[redacted]	[redacted]	[redacted]	$2.638
Oct-15	Swaps	($3,488,100)	[redacted]	6,996,753	[redacted]	[redacted]	[redacted]	$2.563
Nov-15	Swaps	($3,288,730)	[redacted]	5,773,557	[redacted]	[redacted]	[redacted]	$2.033
Dec-15	Swaps	($2,747,180)	[redacted]	4,259,752	[redacted]	[redacted]	[redacted]	$2.206
Total		**($39,842,325)**	[redacted]	**76,630,630**	[redacted]			

Consistent with Tampa Electric's non-speculative risk management plan objective, Tampa Electric's natural gas hedging plan provided price stability and certainty during 2015. For 2015, the calendar year net position for natural gas hedges was higher than the closing price of natural gas, resulting in a mark-to-market net loss of $39.8 million. Natural gas prices dropped significantly in 2015 due to an abundance of natural gas production and nearly full storage at the end of the summer injection season.

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 loss of approximately $39.8 million in 2015; more importantly, Tampa Electric was

TAMPA ELECTRIC COMPANY
DOCKET NO. 160001-EI
OPC'S FIRST SET OF
INTERROGATORIES
INTERROGATORY NO. 1
PAGE 1 OF 1
FILED: MAY 23, 2016

1. **What are the Company's cumulative natural gas hedging gains or losses from 2002 through 2015?**

A. **Tampa Electric's cumulative net natural gas hedging results for 2002 through 2015 is a cost of $421,260,058.**

TAMPA ELECTRIC COMPANY
DOCKET NO. 160001-EI
OPC'S SECOND SET OF INTERROGATORIES
INTERROGATORY NO. 11
PAGE 1 OF 1
FILED: AUGUST 22, 2016

11. **Natural gas financial hedging gain or loss for 2016 as of July 31, 2016:**

a. **Please update the projected amount of the anticipated natural gas financial hedging loss that was provided in the Company's May 2016 response to OPC Interrogatory No.2.**

b. **What was the actual natural gas financial hedging loss from January 1 through July 31, 2016?**

c. **What is the estimated amount of natural gas financial hedging gain or loss from August 1 through December 31, 2016?**

d. **Since the Company's May 2016 response to OPC on the projected 2016 natural gas financial hedging loss, please explain whether the 2016 projected loss has increased or decreased and by how much in terms of dollars and percentages.**

A. **a.** **Tampa Electric projects it will have a natural gas financial hedging loss of $18,460,765 for 2016.**

b. **As reported in Tampa Electric's Hedging Activity Report filed on August 18, 2016, the results for January 1, 2016 through July 31, 2016 are a loss of $17,877,735.**

c. **The projected natural gas financial hedging loss for the period August 1, 2016 through December 31, 2016 is $583,030.**

d. **Tampa Electric's projected 2016 loss has increased by $309,600, which equates to a 1.7 percent change.**

REDACTED

TAMPA ELECTRIC COMPANY
DOCKET NO. 160001-EI
OPC'S SECOND SET OF INTERROGATORIES
INTERROGATORY NO. 12
PAGE 1 OF 1
FILED: AUGUST 22, 2016

12. Projected natural gas financial hedging gains or losses for 2017 as of July 31, 2016:

a. Please provide the projected natural gas hedging gain or loss for calendar year 2017 based on the hedging positions the Company has already executed.

b. As part of this response, what percentage of the total anticipated natural gas burn for 2017 has already been hedged?

A. a. Tampa Electric projects a natural gas hedging gain of $3,201,935 for 2017.

b. Tampa Electric has hedged approximately [redacted] of its expected natural gas usage for 2017.