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July 3, 2017

VIA: ELECTRONIC FILING

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

Re: Analysis of IOUs' hedging practices
FPSC Docket No. 170057-EI

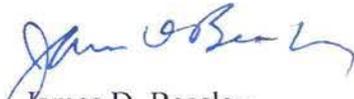
Dear Ms. Stauffer:

Attached for filing in the above docket on behalf of Tampa Electric Company are the following:

1. Prepared Direct Testimony of J. Brent Caldwell
2. Prepared Direct Testimony of David E. Bly

Thank you for your assistance in connection with this matter.

Sincerely,


James D. Beasley

JDB/pp
Attachment

cc: All Parties of Record (w/attachment)



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 170057-EI
IN RE: ANALYSIS OF IOU'S HEDGING PRACTICES

TESTIMONY
OF
J. BRENT CALDWELL

FILED: JULY 3, 2017

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **PREPARED DIRECT TESTIMONY**

3 **OF**

4 **J. BRENT CALDWELL**

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

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

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

15
16 **A.** I received a Bachelor's degree in Electrical Engineering
17 from Georgia Institute of Technology in 1985 and a Master
18 of Science degree in Electrical Engineering in 1988 from
19 the University of South Florida. I have over twenty years
20 of utility experience with an emphasis in state and
21 federal regulatory matters, fuel procurement and
22 transportation, fuel logistics and cost reporting, and
23 business system analysis. In October 2010, I assumed
24 responsibility for long-term fuel supply planning and
25 procurement for Tampa Electric's generating stations.

1 Q. Have you previously testified before the Commission?

2

3 A. Yes. I have submitted written testimony in the annual
4 fuel docket since 2011. In 2015, I testified in Docket
5 No. 150001-EI on the subject of natural gas hedging. I
6 also have testified before the Commission in Docket No.
7 120234-EI regarding the company's fuel procurement for
8 the Polk 2-5 Combined Cycle ("CC") conversion project.

9

10 Q. What is the purpose of your testimony?

11

12 A. The purpose of my testimony is to address key issues
13 identified at a May 17, 2017 issue identification meeting
14 among the Staff, the investor-owned electric utilities
15 ("IOUs") and various intervenors. The issues primarily
16 have to do with whether it is in the consumers' best
17 interests in Florida for the IOUs to continue natural gas
18 financial hedging activities and, if so, whether any
19 changes should be made to the manner in which the IOUs
20 conduct their financial hedging activities. Also at issue
21 is the appropriate regulatory implementation process for
22 any changes that are deemed appropriate. Finally, the
23 remaining issue is whether a hedging opt out tariff should
24 be offered to large-demand customer classes of the IOUs.

25

1 **Q.** Please provide a brief background regarding natural gas
2 financial hedging in Florida and the current status of
3 that hedging.

4
5 **A.** Financial hedging of natural gas prices by the IOUs has
6 been a subject of serious consideration by the Commission
7 dating back to 2001. The Commission has a long-standing
8 goal of mitigating the volatility of natural gas prices
9 and the impact of that volatility on customers' utility
10 bills.¹ In recent years declining natural gas prices,
11 while a good thing overall for utility customers in
12 Florida, have given rise to hedging settlement losses,
13 which have become the focus of many affected persons.

14
15 The issue of hedging losses has been prominent in recent
16 fuel adjustment proceedings. In the 2016 fuel proceeding,
17 the Commission approved a joint proposal of the IOUs to
18 reduce the level of their financial hedging. The
19 companies jointly proposed a reduction in the percentage
20 of volume hedged under the previous plan in April 2016.
21 After the Commission's decision to approve that plan, the

¹ Hedging practices were initially approved by Order No. PSC-02-1484-FOF-EI, issued October 30, 2002 in Docket No. 011650-EI. Also see Tampa Electric's post-workshop comments filed in Docket No. 170057 on March 6, 2017 for a more detailed description of the Commission's consideration of hedging practices since 2002.

1 order was protested and the change was not implemented.²

2

3 **Q.** Please describe subsequent events regarding hedging,
4 given the protest of the utilities' proposal to reduce
5 their level of hedging.

6

7 **A.** On October 24, 2016, Tampa Electric as well as the other
8 investor owned utilities ("IOUs"), Florida Power & Light
9 ("FPL"), Gulf Power Company ("GPC") and Duke Energy
10 Florida ("DEF"), entered into a Stipulation and
11 Settlement Agreement with OPC, Florida Industrial Power
12 Users Group ("FIPUG") and Florida Retail Federation
13 ("FRF"). Under the terms of the agreement, the IOUs agreed
14 to put in place a 100 percent moratorium on any new
15 hedges, effective immediately upon the Commission's
16 approval of the Agreement with that moratorium extending
17 through the calendar year 2017.

18

19 **Q.** What else was included in the agreement?

20

21 **A.** The agreement called for a workshop or workshops to
22 consider the alternatives to prospectively resolve the

² Order No. PSC-16-0247-PAA-EI granting investor-owned utilities' joint petition for approval of modifications to risk management plans, issued June 27, 2016 in Docket No. 160096-EI was protested by OPC's petition protesting and requesting evidentiary hearing on PAA Order PSC-16-0247-PAA-EI, submitted July 15, 2016. Docket No. 160096-EI was subsequently consolidated with the fuel docket-- No. 160001-EI.

1 hedging issues, including but not limited to a risk-
2 responsive approach, a reduction in current levels of
3 hedging and hedging durations, and use of different
4 financial hedging instruments altogether. The stated goal
5 was either establishing a basis for the IOUs to present
6 risk management plans for the 2018 period that all
7 stakeholders could agree upon or not object to, or
8 reaching some other resolution of the hedging issues
9 identified in Docket 160001-EI. The agreement was
10 approved by the Commission on December 5, 2016, with the
11 issuance of Order No. PSC-16-0547-FOF-EI.

12
13 **Q.** Have there been any workshops?

14
15 **A.** Yes, On January 10, 2017, representatives from the IOUs,
16 Staff and intervenors attended the informal workshop at
17 the Commission. The subject of the workshop was a
18 presentation about the hedging proposal recommended by
19 Staff witness Gettings in his testimony filed in the 2016
20 fuel docket. Mr. Gettings described his model, analysis
21 results, and details of his proposal and answered
22 questions from the companies and intervenors. The purpose
23 of Mr. Gettings' four-stage hedging proposal is to
24 mitigate price volatility while limiting hedging losses.
25 The workshop was followed with the utilities and

1 intervenors having opportunities to explore Mr. Gettings'
2 model through questions and interaction.

3
4 Another workshop was scheduled for February 21, 2017 to
5 allow the parties to provide feedback on the Staff
6 proposal as well as alternative hedging proposals. The
7 utilities presented a joint hedging proposal to use out-
8 of-the-money ("OTM") call options instead of the
9 previously employed swaps. The OTM call option approach
10 serves as an effective method of achieving price spike
11 protection that is significantly less complex than the
12 Gettings model and at the same time, allows customers to
13 participate in downward market price movements during
14 periods of declining natural gas prices. With the OTM
15 call option approach, utilities will not sustain
16 settlement losses. Each of the IOUs provided an analysis
17 of the costs and potential effectiveness of the OTM call
18 option hedging strategy and answered questions about
19 their analyses and the proposed implementation of this
20 strategy.

21
22 Interested parties submitted post-workshop comments
23 following the February 21, 2017 workshop.³

³ Tampa Electric submitted its post-workshop comments in Docket No. 170057-EI on March 6, 2017.

1 **Hedging Goals**

2 **Q.** How does Tampa Electric view the goals of the hedging
3 program at present?

4
5 **A.** Tampa Electric has heard the Commission's comments to the
6 effect that financial hedging provides valuable price
7 volatility mitigation to customers, both over the years
8 and in the most recent two fuel hearings. The company has
9 also heard the concerns expressed by both the Commission
10 and other parties to the docket, that the costs, or
11 settlement losses on financial swaps, are too expensive.
12 These losses represent the lower prices that customers
13 could have paid in recent years as fuel prices went down,
14 if they were fully exposed to market fuel price
15 volatility. Therefore, the company anticipates the goals
16 of a successful hedging program at the present time will
17 be (1) to mitigate fuel price volatility by constraining
18 upward fuel price movements and (2) to maintain the
19 ability to participate in fuel markets when prices are
20 declining.

21
22 **Q.** In light of the issues relative to hedging settlement
23 losses, do you believe it is in the consumers' best
24 interests for the IOUs to continue natural gas hedging
25 activities?

1 **A.** Yes, I do. As I stated earlier, the Commission has
2 studied financial hedging of natural gas prices very
3 carefully since the early 2000's and has consistently
4 found that hedging has been beneficial to consumers in
5 Florida. However, I recognize the focus on protecting
6 against the effects of price volatility has shifted to a
7 dual focus on protection against price spikes and the
8 avoidance of hedging losses.

9
10 **Q.** If hedging is determined to be in the consumers' best
11 interests, what changes, if any, should be made to the
12 manner in which electric utilities conduct their natural
13 gas financial hedging activities?

14
15 **A.** If the Commission determines that hedging should
16 continue, but modified to mitigate hedging losses, there
17 appear to be two options for consideration. The first is
18 an approach proposed by witness Gettings and the second
19 is the OTM call option approach advanced by the IOUs at
20 a February workshop earlier this year.

21
22 **Gettings Hedging Proposal**

23 **Q.** What is the proposal recommended by witness Gettings as
24 a substitute to the utilities' previous risk management
25 plans?

1 **A.** Witness Gettings calls his proposal a risk responsive
2 hedging plan. It differs from previous utility risk
3 management plans as it uses a Value-at-Risk ("VaR") model
4 to determine when to execute new hedges as well as when
5 to liquidate, or protect with options, hedges currently
6 held. The Gettings proposal requires the company to
7 establish tolerances for hedge losses and to formulate a
8 strategy of prescribed responses to defend those
9 tolerances against risk conditions in the market. This
10 approach does not eliminate the potential for hedging
11 losses.

12
13 The Gettings approach utilizes four types of natural gas
14 hedges. The first type of hedge is a programmatic hedge,
15 in which swaps are executed for a portion of the portfolio
16 for an extended period forward throughout the calendar
17 year, regardless of market conditions. These types of
18 programmatic hedges are exactly the type utilized in the
19 utilities' previous Risk Management plans. Their purpose
20 in the Gettings approach is to assure some price
21 volatility protection and to limit the volume of hedges
22 required under the defensive strategy.

23
24 The second type of hedge is a defensive hedge in which
25 swaps are executed after a market price movement causes

1 a cost threshold chosen by the utility to be breached
2 within the VaR model. The purpose of this type of hedge
3 is to provide protection against upside price movement
4 with a utility-defined loss threshold.

5
6 The third type of hedge utilized in the Gettings program
7 is the contingent hedge. This type of hedge is initiated
8 after market price movements cause a utility-defined
9 hedge loss tolerance to be breached within the VaR model.
10 This type of hedging strategy consists of suspending
11 hedges, the use of options as a means to constrain hedging
12 losses, and the ability to unwind existing hedges.

13
14 The fourth type of hedge utilized under the Gettings
15 approach is the discretionary hedge. This type of hedging
16 occurs when the prices are deemed attractive by the risk
17 manager. Mr. Gettings did not encourage this type of
18 hedging; however, he does not preclude it.

19
20 **Q.** Are there any costs to implement the proposal suggested
21 by witness Gettings?

22
23 **A.** Yes, the costs are expected to be substantial to design,
24 develop and implement new functions and tools to run the
25 VaR model and generate required reporting in the Energy

1 Trading and Risk Management system. Additional personnel
2 are expected to be needed to maintain and run the Gettings
3 hedging program. Each of these needs will cause an
4 incremental cost and require significant time to
5 implement the hedging strategies recommended by witness
6 Gettings.

7
8 **OTM Call Option Hedging Proposal**

9 **Q.** Please describe the utility proposal.

10
11 **A.** During the February 2017 workshop, the utilities proposed
12 an OTM call option approach as an alternative to the
13 Gettings approach. The OTM call option is a financial
14 instrument that requires the purchaser to pay an upfront
15 premium in return for the ability to receive payment if
16 the future price of an underlying asset rises above a
17 strike price that is higher than the current market for
18 that asset.

19
20 OTM call options protect against a defined level of upward
21 price movement. Options expiring in the money provide
22 price protection while options expiring out of the money
23 do not result in any costs beyond the premium cost already
24 incurred. Similar to an insurance premium cost, the
25 options cost is "sunk" and provides a benefit only when

1 needed, in this instance when fuel prices have exceeded
2 a defined cost threshold, or the strike price for which
3 the options were purchased. In addition, customers are
4 not limited from participating in downward price
5 movements when market fuel prices decline.

6
7 The testimony of Tampa Electric witness David E. Bly
8 describes in greater detail the OTM call option proposal,
9 potential benefits and risks of the program, and Tampa
10 Electric's expected implementation if the program is
11 approved.

12
13 **Evaluation of Alternatives**

14 **Q.** Is it your opinion that the OTM call option program would
15 provide customers with protection against price
16 volatility, protection against extreme upward price
17 movements, and the ability to fully participate in
18 downward fuel price movements?

19
20 **A.** Yes, it is. The OTM call option approach will protect
21 customers from spikes in natural gas prices and provide
22 some associated price volatility mitigation. And,
23 consistent with the new objective of participation in
24 downward price movements as expressed by various parties
25 in this and the annual fuel docket, the OTM call option

1 approach will allow participation in declining prices.

2
3 **Q.** How do you expect the price protection provided by the
4 OTM call option program to compare to that provided by
5 the Gettings hedging approach?

6
7 **A.** I believe that the OTM call option approach would be more
8 beneficial for IOU customers. First and foremost, the
9 call option approach will achieve the two key goals of
10 hedging as we perceive them to be. The call option
11 approach will protect customers from price spikes in the
12 natural gas market. The call option approach will also
13 avoid hedging settlement losses when the price of natural
14 gas declines, which is the major criticism the intervenors
15 have lodged against the previous swaps-based hedging
16 program.

17
18 Mr. Gettings' approach would continue the use of swaps
19 which would continue to expose customers to potential
20 hedging settlement losses.

21
22 The call option approach will also be far less
23 complicated, less costly to implement, less confusing,
24 and likely less contentious than the risk responsive
25 proposal advanced by Mr. Gettings. The call option

1 approach will be quicker and easier to implement, audit
2 and otherwise regulate than the Gettings proposal. I
3 believe the OTM call option approach is the best
4 alternative for achieving the dual objectives of price
5 spike protection and allowing customers to participate in
6 downward price movements.

7
8 When it was proposed, the call option approach had the
9 unanimous support of the investor-owned electric
10 utilities who will be required to implement the hedging
11 approach the Commission ultimately approves.

12
13 The companies' back-testing analysis has shown that the
14 OTM call option approach would have had lower settlement
15 losses than the legacy swaps program over the last 12
16 years. However, the volatility mitigation would not have
17 been as effective as that of the legacy swaps program.
18 Therefore, with the changing objectives of a hedging
19 program going forward, Tampa Electric believes that any
20 departure from the hedging model previously approved by
21 the Commission prior to the moratorium should favor the
22 OTM call option approach discussed above.

23
24 **Q.** If changes are made to the conduct of natural gas
25 financial hedging activities, what regulatory

1 implementation process is appropriate?
2

3 **A.** As I previously stated, the call option approach will be
4 quicker and easier to implement, audit and otherwise
5 regulate than the Gettings proposal. In particular, I
6 believe it will require up to two years to implement the
7 Gettings approach. The company will need to hire
8 individuals with specific skillsets, implement and test
9 new features in the Energy Trading and Risk Management
10 System, and, most importantly, determine the VaR model
11 thresholds and receive approvals from internal risk
12 oversight committees and the Commission for these
13 thresholds.
14

15 **Hedging Opt-Out Proposal**

16 **Q.** Should a hedging opt-out tariff be offered for each IOU's
17 large-demand customer classes?
18

19 **A.** No. Tampa Electric does not purchase natural gas or any
20 other generation fuel for different customer classes or
21 a particular customer class. Hedging is not performed
22 for individual customer classes. If hedging is
23 appropriate, it is appropriate for all customer classes.
24 Implementation of any such opt-out program would be
25 fraught with challenges, confusion, litigation and claims

1 of discrimination by others who might want to opt out.
2 Similarly, those challenges and confusion would be
3 compounded over time as customer decisions change, e.g.,
4 when prices spike if those that originally chose to "opt
5 out" want to opt back in to take advantage of protection
6 that hedges are affording other customers.
7

8 **Summary**

9 **Q.** Please summarize your direct testimony.
10

11 **A.** Tampa Electric recognizes and appreciates the
12 Commission's serious study of issues relating to the
13 hedging of natural gas purchases. The benefits of hedging
14 have been recognized by the Commission for many years.
15 Tampa Electric recognizes that the issue of hedging
16 settlement losses has come into focus in recent years,
17 owing to the decline in natural gas prices. The company
18 also recognizes that the original hedging goal of
19 mitigating volatility in natural gas prices has been
20 linked to a second goal of avoiding hedging settlement
21 losses, given the decline in natural gas prices in recent
22 years. To achieve these dual goals, a change may be
23 warranted in the hedging practices previously approved by
24 the Commission. Between the risk responsive risk
25 management approach advanced by Mr. Gettings and the OTM

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call option hedging proposal advanced by the IOUs during recent workshops, the latter appears to be the "best fit" for a regulated utility. The OTM call option approach will continue to meet the Commission's goal of mitigating price volatility of natural gas and its impact on customers' costs by providing protection against price spikes while at the same time enabling utility customers to participate in declines in natural gas pricing without suffering hedging settlement losses. Finally, a hedging opt-out provision for large industrial customers is not appropriate for the reasons described above.

Q. Does this conclude your testimony?

A. Yes, it does.



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 170057-EI
IN RE: ANALYSIS OF IOU'S HEDGING PRACTICES

TESTIMONY
OF
DAVID E. BLY

FILED: JULY 3, 2017

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

DAVID E. BLY

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2
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4
5
6 **Q.** Please state your name, address, occupation and employer.

7
8 **A.** My name is David E. Bly. My business address is 702 N.
9 Franklin Street, Tampa, Florida 33602. I am employed by
10 TECO Services, Inc. ("TSI") as Director, Independent Risk
11 Oversight. I have responsibility for the Middle Office
12 oversight function for Tampa Electric and other utilities
13 serviced by TSI. My department handles areas such as deal
14 confirmation, valuation, credit management, risk
15 reporting, and compliance with pertinent market rules and
16 regulations.

17
18 **Q.** Please provide a brief outline of your educational
19 background and business experience.

20
21 **A.** I received a Bachelor of Science degree in Business
22 Administration from the University of Florida, majoring
23 in Finance. I also received a Master of Science degree in
24 Applied Finance from the University of Colorado - Denver.
25 I have nearly 20 years of experience working in risk

1 management and energy markets for utilities in multiple
2 jurisdictions.

3
4 **Q.** What is the purpose of your testimony?

5
6 **A.** The purpose of my testimony is to explain how an out-of-
7 the-money ("OTM") call option hedging strategy would
8 work, describe the benefits of using OTM call options to
9 mitigate fuel price volatility, and discuss the company's
10 concerns about the hedging strategies recommended by
11 staff's witness Gettings in the 2016 fuel adjustment
12 docket.

13
14 **Q.** Please describe the OTM call option hedging strategy
15 proposed by the investor-owned utilities ("IOUs") in an
16 earlier workshop in this docket.

17
18 **A.** The utilities propose to purchase OTM call options to
19 hedge a defined percentage of expected natural gas burn,
20 at a defined price level (+X percent) above the then-
21 expected market prices of natural gas, for a defined
22 forward period.

23
24 **Q.** Are there portions of the OTM call option strategy that
25 Tampa Electric would apply differently than the other

1 utilities?

2

3 **A.** Yes, possibly. The OTM call option proposal allows
4 individual Florida utilities the flexibility to specify
5 company-specific items in their respective risk
6 management plans. Each utility would utilize this process
7 to obtain approval from the Commission for its individual
8 risk management plan. Tampa Electric expects it would
9 request Commission approval of the following variables in
10 its annual risk management plan: the percentage of
11 projected natural gas volume to be hedged, the strike
12 price set point (e.g., X percent above current market
13 prices), a maximum options premium budget (not to be
14 exceeded without Commission approval), and time period
15 for which hedges will be executed.

16

17 **Q.** How would using OTM call options benefit customers?

18

19 **A.** OTM call options are a risk-responsive natural gas hedging
20 alternative with the following characteristics:

- 21 • Options provide financial protection against a
22 defined level of upward movement in natural gas
23 market prices.
- 24 • Options expiring in the money provide protection
25 from natural gas market price increases.

- 1 • Options expiring out of the money do not result in
- 2 any additional costs other than the option premium.
- 3 • Option costs are "insurance premiums" for their
- 4 protection against price spikes.
- 5 • Customers have 100 percent participation in downside
- 6 price movements when market prices of natural gas
- 7 decline.
- 8 • OTM call options do not result in settlement losses
- 9 when market prices of natural gas decrease.

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Q. Are these benefits unique to the OTM call option strategy?

A. The OTM call option strategy is unique in that it is the only proposed strategy that will not result in settlement losses when market prices decrease.

Q. Are there risks associated with using OTM call options to hedge fuel prices?

A. It could be argued that there is a risk associated with utilities expending significant dollars on premiums to purchase OTM call options and subsequently not collecting any settlement dollars to offset those losses. However, as stated previously, the option premiums are akin to insurance premiums. That is, a defined sum spent to

1 protect against an uncontrollable risk. Therefore, the
2 option premium dollars are truly managing risk and not
3 creating incremental risk.

4
5 **Q.** Are these risks unique to the OTM call options approach?

6
7 **A.** The OTM call option approach is the only one which
8 requires an upfront cost. However, as stated previously,
9 it is also the only proposal to ensure no hedging losses.

10
11 **Q.** Please describe your impressions of the hedging
12 strategies suggested by witness Gettings.

13
14 **A.** From a purely quantitative perspective, there are aspects
15 of the Gettings approach that appear to be an improvement
16 over the utilities' prior hedging strategy. The use of
17 current market factors as a decision point for placing
18 hedges is not without merit. However, Tampa Electric is
19 primarily concerned with the degree of complexity of the
20 Gettings model, the lack of specificity about how the
21 model would be implemented as well as the cost of
22 implementation. The Gettings proposal requires daily
23 monitoring and decision-making about whether to add or
24 eliminate hedge positions, based on the results of a Value
25 at Risk ("VaR") model the utility must maintain. The

1 results of a VaR model can vary significantly depending
2 on the types of model parameters assigned to it. Things
3 such as historical or implied volatility, the holding
4 period of the portfolio, confidence level, decay factor
5 of previous prices, and other factors all play a critical
6 role in the model's results. Different utilities may
7 choose slightly different parameters, or could be
8 constrained in the choices they make by the technology or
9 system they utilize to run the model. Tampa Electric has
10 concerns about how to manage the type of model Mr.
11 Gettings recommends and how to defend this model and
12 resulting decisions from later criticisms or hindsight
13 review if outcomes are deemed unfavorable.

14
15 **Q.** Please describe any concerns you have about following the
16 hedging strategies recommended by witness Gettings.

17
18 **A.** First, implementing the Gettings VaR model would require
19 a substantial commitment of time and resources.
20 Additional time would be needed for model testing, report
21 building, and then to analyze and establish appropriate
22 boundaries, thresholds, or percentages that affect the
23 types and amounts of hedges to be undertaken.

24
25

1 My main concern surrounds the contingent hedging strategy
2 within the Gettings approach. While the purpose of that
3 strategy is plain - to limit downside price losses
4 associated with previously established positions - it can
5 be construed as trading around a hedge position. The
6 utilities have historically avoided any activity that
7 could be construed as "trading" and have only focused on
8 hedging the underlying risk, *i.e.*, the risk of upward
9 price movements. I believe the contingent portion of the
10 Gettings approach takes us closer to the "trading" realm.

11
12 Another concern is that in times of high market
13 volatility, there is the potential for the Gettings
14 approach to signal that the utility should simultaneously
15 execute both defensive hedges and contingent hedges.
16 Those two strategies are in complete opposition to one
17 another. While the utilities could state in advance which
18 strategy they would employ in case of that conflict, the
19 very nature of the conflict itself, and the accompanying
20 decisions the utility would have to make in a volatile
21 market, make the approach less than optimal.

22
23 Finally, one of the parties' and Commission's recent main
24 concerns about natural gas hedging is the potential for
25 downside market price movements to result in settlement

1 losses. This risk is not eliminated by adopting the
2 hedging strategies suggested by witness Gettings. On the
3 contrary, since swaps are used as the primary hedging
4 tool under the Gettings approach, losses are certain to
5 occur in times of falling prices.

6
7 **Q.** How would the use of OTM call options compare to the
8 Gettings approach to hedging fuel price volatility?

9
10 **A.** OTM call options would achieve much of what the Gettings
11 approach attempts to accomplish, limiting upside price
12 spikes while preserving downward price movements for the
13 benefits of customers, with much less complexity and a
14 quicker timeline to implement. The OTM call option
15 proposal could be implemented as soon as the Commission
16 approved the company's revised risk management plan,
17 while the Gettings proposal would require one to two years
18 to implement.

19
20 **Q.** Please summarize your direct testimony.

21
22 **A.** Tampa Electric believes the OTM call option proposal is
23 a much simpler method to achieve the same goals as the
24 staff proposal set forth in Mr. Gettings prior testimony
25 in the fuel adjustment docket. The OTM call option

1 proposal will mitigate upward price spikes, and it will
2 be less expensive when compared to swap settlement losses
3 experienced by the utilities under their prior hedging
4 approach. It will provide that protection with a zero-
5 dollar limit on settlement losses, a much lower limit on
6 settlement losses than would be achieved under the
7 Gettings proposal. Mr. Gettings introduced the concept of
8 an "efficient frontier" for the aspects of risk reduction
9 and cost-effectiveness. However, these two aspects cannot
10 be assessed in a vacuum. Other important aspects such as
11 implementation timeline and costs, ongoing model
12 complexity and administration, and ease of reporting and
13 monitoring must be carefully considered. This raises the
14 question of the appropriate balance to achieve cost-
15 effective hedging. Tampa Electric does not believe it is
16 in customers' best interests to spend additional money
17 and time implementing a more complex methodology such as
18 the Gettings proposal, when the OTM call option proposal
19 is likely to yield very similar results over time. Tampa
20 Electric believes the OTM call options proposal strikes
21 the right balance of protection against price spikes, zero
22 exposure to settlement losses, and reasonable option
23 premium costs for that price spike protection.

24
25 Additionally, Tampa Electric has a very important concern

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about the Gettings proposal. The Gettings approach is vaguely defined and leaves its interpretation and implementation far too open; and it would call for implementation decision-making at various undefined points moving forward. This is very disconcerting to Tampa Electric and could make it very complex for other parties and the Commission, in the regulatory review process, to ascertain whether the model has been complied with.

Q. Does this conclude your direct testimony?

A. Yes, it does.