

BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

DOCKET NO. 140001-EI

## FUEL AND PURCHASED POWER COST RECOVERY CLAUSE WITH GENERATING PERFORMANCE INCENTIVE FACTOR.

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Pages 467 through 535

**PROCEEDINGS:** HEARING

COMMISSIONERS  
PARTICIPATING: CHAIRMAN ART GRAHAM  
COMMISSIONER LISA POLAK EDGAR  
COMMISSIONER RONALD A. BRISÉ  
COMMISSIONER EDUARDO E. BALBIS  
COMMISSIONER JULIE I. BROWN

DATE: Monday, December 1, 2014

TIME: Commenced at 8:00 p.m.  
Concluded at 9:00 p.m.

PLACE: Betty Easley Conference Center  
Room 148  
4075 Esplanade Way  
Tallahassee, Florida

REPORTED BY: LISA GAINES, CM, RPR  
Court Reporter and  
Notary Public in and for the  
State of Florida at Large

APPEARANCES: (As heretofore noted.)

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## 1                           P R O C E E D I N G S

2         Whereupon,

3                           KIM OUSDAHL

4         was called as a witness, having been previously duly  
5         sworn, was examined and testified as follows:

## 6                           CONTINUED CROSS EXAMINATION

7         BY MR. MOYLE:

8               Q       So, just to take that, the only way that you  
9         believe that FPL doesn't earn the return on their  
10       investment is if this Commission says you were  
11       imprudent?

12          A       That's right. It's a required cost. We  
13         would have earned that cost if we acted imprudently.

14          Q       And we talked about this in your deposition a  
15       little bit but stated conversely, every expense that's  
16       realized as a result of FPL's investment in this  
17       Woodford Project or other projects gets passed through  
18       to ratepayers, correct?

19          A       That's correct. Expenses are incurred on  
20       behalf of customers. They are the beneficiaries of the  
21       production.

22          Q       So, would you also agree that there's not  
23       much risk associated to -- there's not much risk  
24       associated with this deal for FPL shareholders and that  
25       the only risk we've identified is this Commission might

1       **deem a decision imprudent or this Commission might lower**  
2       **the return on equity and there's no operational risk.**

3           A       Well, I think there's execution risk on any  
4       of the activities we engage in as a regulated entity.  
5       The Commission reviews our plans against our  
6       performance. And if we don't execute properly, there's  
7       a risk that we will have a disallowance.

8           **Q       What execution risk do you have in this**  
9       **proposed Woodford Project?**

10           MR. BUTLER: I'm going to object to this line  
11       of questions because I don't see it relating to  
12       Ms. Ousdahl's testimony.

13           CHAIRMAN GRAHAM: I guess the question I  
14       have -- and I guess I'm taking the words right out  
15       of his mouth -- is who would be the best person to  
16       ask this question?

17           MR. BUTLER: He already asked to Mr. Forrest.  
18       I think that Dr. Taylor has quite of bit of  
19       knowledge about the nuts and bolts of the gas  
20       industry. Maybe that's something where he can get  
21       additional information, but as Mr. Moyle already  
22       acknowledged, he went through this whole line of  
23       questions.

24           So, if Mr. Forrest, who is really the right  
25       witness --

1                   MR. MOYLE: Well, I want to understand the  
2 execution risk that FPL Is going to be incurring  
3 with respect to what it's doing in this deal and  
4 how much risk is it taking.

5                   I mean, my understanding is Woodford is the  
6 operator. They got all the operation risk, and FPL  
7 is gathering paper and pushing paper through.

8                   CHAIRMAN GRAHAM: It sounds like to me from  
9 Mr. Butler that this is probably not the best  
10 witness. Either Forrest was or Dr. --

11                  MR. MOYLE: Taylor?

12                  CHAIRMAN GRAHAM: -- Taylor would be.

13                  MR. MOYLE: I'll tell you what, how about if  
14 I focus on the paper aspects of this.

15 BY MR. MOYLE:

16                  Q        **Ms. Ousdahl, with respect to what FPL has to**  
17 **do under your understanding, they have to gather paper**  
18 **essentially as it relates to this Woodford Project,**  
19 **correct?**

20                  A        I cannot testify as to what the commercial  
21 team does. I'm certain that it's more than gathering  
22 paper.

23                  Q        **Okay. Well, let me maybe clarify what I**  
24 **mean. I mean you have to get these jibs from the**  
25 **PetroQuest, right?**

1           A       Yes, that would be the accounting for the  
2 investment.

3           Q       I'm sorry. Maybe I didn't use the right  
4 term. So, you get jibs, and jibs are basically  
5 invoices?

6           A       Yes.

7           Q       And you aggregate those and put those  
8 together and then prepare a filing, you know, for this  
9 Commission where you say here's the cost that we  
10 incurred. We think it's prudent. Please pass this  
11 through to ratepayers.

12                  Is that fair?

13           A       That would be quite a shorthand version of  
14 what we would have to do with our invoices, yes.

15           Q       It's after 8:00. I'm going for shorthand.

16           A       All right.

17           Q       And you were asked a lot of questions by  
18 Mr. Rehwinkel about what rights the Commission may have  
19 with respect to looking at papers and decisions and  
20 audits. This Commission wouldn't have the ability to  
21 audit anything related to the PetroQuest entity or the  
22 operating entity, correct?

23           A       It cannot audit PetroQuest. It cannot audit  
24 our vendors. It cannot audit third parties. It can  
25 audit the entity it regulates.

1           Q       The best evidence of weights that you may  
2       have by contract with PetroQuest for these records --  
3       that would be in the contractual documents attached to  
4       Mr. Forrest's testimony as compared to your testimony;  
5       is that right?

6           A       Yes. It's in the model form agreement that  
7       y'all spent quite some time talking about today.

8           Q       The liabilities that would flow into FPL's  
9       subsidiary -- all of those liabilities are passed  
10      through to the ratepayers; is that right?

11          A       All of the costs of operation, if being  
12      prudently incurred, would be incurred by customers,  
13      that's correct.

14          Q       And that would include any liabilities,  
15      correct?

16          A       Right. Assets or liabilities, working  
17      capital and common expenses.

18          Q       You confused me when you said that you  
19      thought the limited liability company could capture some  
20      liability if it exceeded the costs of the contract?

21          A       Are you referring now to my deposition  
22      testimony? Because you and I haven't talked about  
23      liabilities today or the LLC. I don't know if you want  
24      to refer to my deposition.

25          Q       You know what, let's move on. Mr. Butler

1 used a term the other day when he was arguing before  
2 this Commission on a motion to dismiss. He said really  
3 what this is is capital substitution. Are you familiar  
4 with the term "capital substitution"?

5 A No, I need some context.

6 Q My interpretation of what he was talking  
7 about was that right now FPL does not earn a return,  
8 does not earn any money on fuel hedges. Is that your  
9 understanding?

10 MR. BUTLER: I can assure you that's an  
11 incorrect interpretation.

12 MR. MOYLE: I'm sorry?

13 MR. BUTLER: I can assure you that was an  
14 incorrect interpretation of my capital substitution  
15 point.

16 MR. MOYLE: Okay.

17 BY MR. MOYLE:

18 Q Let's forget your capital substitution point.  
19 Let me ask you this: You're responsible for the hedging  
20 filings that goes through the clause; is that right?

21 A No, but I'm aware of them.

22 Q And as they go through now, there's no return  
23 earned on the hedging program, correct? It's just a  
24 straight pass-through?

25 A On fuel hedging?

1           Q       **Yes, ma'am.**

2           A       There's no investment, so there's no earned  
3       return.

4           Q       **So, in this case, you know, this is being**  
5       **characterized as hedging. In this case, you, in effect,**  
6       **are now going to be earning a return on what has been**  
7       **described as hedging, correct?**

8           A       On our investment to provide the physical  
9       hedge to customers, yes.

10          Q       **You're the chief financial officer for**  
11       **Florida Power & Light, correct?**

12          A       No, I'm not.

13          Q       **Give to me your title.**

14          A       Chief accounting officer.

15          Q       **Chief accounting officer. I'm sorry. You**  
16       **have familiarity with the rating agencies? Part of what**  
17       **you do is interact with rating agencies?**

18          A       I have general familiarity, but I'm not  
19       interacting with the investors or rating agencies.

20          Q       **Well, with respect to your general**  
21       **familiarity, you're aware that PetroQuest is rated below**  
22       **investment grade?**

23          A       That's what you stated, yes.

24                 MR. BUTLER: I'm going to object again. I  
25       don't think this is Ms. Ousdahl's testimony. I

1       don't think it's fair cross examination of her  
2       testimony.

3                     CHAIRMAN GRAHAM: Mr. Moyle.

4                     MR. MOYLE: In her deposition on Pages 132  
5       and 133 -- and the deposition in evidence -- she  
6       talks about, "I think my understanding is  
7       PetroQuest has been in operation for some time.  
8       They have adequate liquidity."

9                     She goes on to talk about some of the risk  
10      factors. Go to that, you know, the cost of capital  
11      may be quite high.

12                  CHAIRMAN GRAHAM: Does she go into Wall  
13      Street or any of that stuff?

14                  MR. MOYLE: I think she's talking about the  
15      10Q which is a filing that's made with the SEC.

16                  CHAIRMAN GRAHAM: All right. I'll allow the  
17      question.

18      BY MR. MOYLE:

19                  Q        I'll represent to you is that in answer to  
20      Interrogatory No. 35 -- this interrogatory is in  
21      evidence -- that your company said that S&P gave  
22      PetroQuest a B/stable rating and Moody's gave PetroQuest  
23      a B3/stable rating.

24                  If I showed you the Moody's and the Standard  
25      and Poor's ratings with respect to what those meant,

1       **would you be able to comment on that?**

2           A       No.

3           Q       **So, you have familiarity with it, but you**  
4       **just don't have the familiarity with respect to that**  
5       **level --**

6           A       Just general familiarity. My deposition was  
7       in response to you putting an SEC document in front of  
8       me and asking me questions. It certainly wasn't me  
9       proffering information about the financial health of  
10      PetroQuest.

11          Q       **No, I tried to keep your deposition out. And**  
12       **in response to a question from Mr. Rehwinkel, you said**  
13       **you understood that the market price can't be considered**  
14       **by PetroQuest or words to that effect. Did I get that**  
15       **right?**

16          A       I don't recall that.

17          Q       **Do you have an understanding whether**  
18       **PetroQuest in their obligation to drill has the ability**  
19       **to consider market price or not in this arrangement?**

20          A       I do not understand that to be the case, no.

21          Q       **You were shown a document by Mr. Rehwinkel.**  
22       **This is the Order 14546, fuel order.**

23          A       Yes.

24          Q       **And I wanted to ask you just a couple of**  
25       **questions about that. Is it your understanding that the**

1 production costs -- the ratepayers are going to be  
2 charged production costs and those production costs are  
3 projected by Mr. Taylor and others to be relatively  
4 stable over time?

5 A I'm a little thrown by your "relatively  
6 stable." The costs do decline over time even during  
7 production, correct.

8 Q I'll tell you what, just assume for the  
9 purposes of our conversation that Mr. Taylor is going to  
10 get up here and say that he thinks the production costs  
11 are stable.

12 A Okay.

13 Q Okay. If he says that when he takes the  
14 stand, you would agree that the order that Mr. Rehwinkel  
15 showed you on Page 2, Paragraph 2, talks about prudently  
16 incurred fossil-fuel-related expenses which are subject  
17 to volatile changes. If Mr. Taylor says that the prices  
18 are stable, how would you reconcile that with the  
19 requirement of volatile changes in Paragraph 2, if you  
20 could?

21 A I think the only way you get to stable cost  
22 is if you're including depletion in those later years of  
23 production. And perhaps it's relatively flat line, but  
24 that's not the whole revenue requirement picture.

25 In addition, as I've already testified to

1       this evening I believe, we're talking about the  
2       volatility created through additional investment which  
3       will be lumpy. So, I think we've established that there  
4       will be volatility if we're allowed to continue to  
5       pursue the strategy.

6           **Q       And you would say there's volatility as a**  
7       **result of the method of accounting; is that right?**

8           A       Investment profiles, the size of the  
9       investments, the timing of the investments and  
10      depletion, yes.

11          **Q       So, it would be your view that you could have**  
12       **volatility based on one year if FPL decides to invest**  
13       **100 million and the next year they decide to invest**  
14       **750 million that that would be a component of volatility**  
15       **that would make it eligible?**

16          A       Absolutely. I mean, there's some serendipity  
17       involved here. We don't get to just identify what we  
18       want to purchase.

19          **Q       These wells are not short-term opportunities.**  
20       **We talked about the production going for 30 years,**  
21       **correct?**

22          A       Correct.

23          **Q       And the order says, "The parties suggest that**  
24       **this flexibility is appropriate to encourage utilities**  
25       **to take advantage of short-term opportunities."**

1           A       Could you refer me, please.

2           Q       **Sure. Page 3 towards the bottom.**

3           A       Yes, I'm with you. I interpreted that to  
4 mean the opportunity is not going to exist for the next  
5 three years while we deliberate on whether or not we get  
6 to take advantage of the opportunity.

7           Q       **So, when it says short-term opportunities,**  
8 **the fact that this is going to go on for a long period**  
9 **of time -- you don't read that as addressing the fact**  
10 **that these operations are going to go on for 30 years?**

11          A       No, I don't think the policy of the  
12 Commission was intended to exclude advantageous purchase  
13 for customers that ended up being a long-lived asset.

14          Q       **So, you talked about the policy of the**  
15 **Commission. Do you have a view -- is the Commission**  
16 **limited in any way with respect to what they could do in**  
17 **terms of regulating in the public interest?**

18          A       Gosh, that's a challenging question. Are  
19 they limited -- could you narrow it down a little?

20          Q       **Sure. If FPL -- I'm just trying to test your**  
21 **understanding. You've given us some testimony about**  
22 **these lawyers. You're not a lawyer, right?**

23          A       No. No.

24          Q       **So, you're looking at these orders and trying**  
25 **to make interpretations of them; is that right?**

1           A     Based on the actions the Commissions have  
2     taken over the years and the written orders and the  
3     outcomes, yes.

4           Q     **Yeah. Would you defer to Mr. Deason on that**  
5     **point or should I continue asking you questions?**

6           A     He's clearly the expert on Commission policy.

7           Q     **Do you think the Commission could approve a**  
8     **solar plant under the same rationale that there's an**  
9     **opportunity for FPL to come in and buy the solar plant**  
10     **and that would reduce the fossil fuel as a quick**  
11     **opportunity. You've got to act now; that FPL should be**  
12     **able to come in and recover the costs of the solar plant**  
13     **under the fuel clause. And they put testimony in that**  
14     **says, hey, we can get a better deal for ratepayers**  
15     **because we're getting a great deal on this plant. We**  
16     **can produce solar panels for less money.**

17                 **Would that be, in your opinion, something**  
18     **that could be recovered?**

19           A     I think that would be a big stretch of the  
20     interpretation of the order.

21           Q     **But the oil and gas is not, in your view?**

22           A     No, it's not, in my view.

23           Q     **Do you think this Commission should be**  
24     **cautious when approving multi-hundred million deals with**  
25     **parties who the Commission doesn't have jurisdiction**

1      **over?**

2            A       I think it's fundamentally the company's  
3      responsibility to make wise investment decisions.  
4      That's why we've tried to lay out guidelines and to seek  
5      approval from the Commission that they agree with the  
6      strategy. And it's our job to execute on that strategy.  
7      And yes, we would do that very carefully.

8            Q       **So, the answer to the question is you think,**  
9      **yes, the Commission should, likewise, be cautious when**  
10     **approving deals in the hundreds of millions of dollars**  
11     **with third parties?**

12          A       Yeah, I think the history that I've seen with  
13      this Commission is they take a lot of care with review  
14      and probing and stress testing the long-term analyses  
15      that we bring to them as do you all as intervenors.

16          Q       **And this doesn't involve your company, but**  
17      **you're aware that there have been recent disputes with**  
18      **third parties that this Commission has not had**  
19      **jurisdiction over in other contexts, Neal, Westinghouse?**

20                    **Are you aware of any disputes related to**  
21      **those entities?**

22          A       Well, if -- no, I do not know what you're  
23      referring to specifically, but we're responsible for  
24      settling disputes and managing disputes associated with  
25      the vendors and contractual relationships that we have,

1 not this Commission.

2 MR. MOYLE: Can I just have a second?

3 CHAIRMAN GRAHAM: Sure.

4 BY MR. MOYLE:

5 Q **A final line of questioning.**

6 A Okay.

7 Q **Are you good?**

8 A Yes, thank you.

9 Q **FPL is outsourcing a lot of functions in this  
10 Woodford deal, correct?**

11 A Yes, I think we're trying to find the right  
12 way to mitigate the risks of not having on day one the  
13 kind of experience that we would collectively like to  
14 have. Absolutely.

15 Q **So, the accounting risk, the operation risks  
16 associated with oil and gas, the --**

17 A Levering of talent of others is one tool  
18 we're using to supplement, you know, our thin  
19 experience, yes.

20 Q **And so, with FPL, what exactly is it doing?  
21 Is it what we talked about with respect to what I'll put  
22 in quotes, the "paper gathering process"? That's what  
23 kind of FPL itself will be doing without outsourcing?**

24 A I still struggle with your characterization.  
25 I mean, certainly, from a back-office perspective we're

1 responsible for the financial accounting for the  
2 transactions which you might characterize as paper  
3 shuffling.

4 I think the commercial support that witness  
5 Forrest and his team will seek to supplement from the  
6 talented team at U. S. Gas won't be paper shuffling.

7 Q **But that U. S. Gas effort to identify the**  
8 **good deals or bad deals -- that's delegated to U. S.**  
9 **Gas; is that right?**

10 A No, I don't believe so, but you'd have to  
11 talk to witness Forrest about that.

12 MR. MOYLE: Thank you for your time.

13 THE WITNESS: You're welcome.

14 CHAIRMAN GRAHAM: Staff?

15 MS. BARRERA: No questions.

16 CHAIRMAN GRAHAM: Commissioners? Redirect?

17 MR. BUTLER: Thank you, Mr. Chairman, I'll be  
18 brief.

19 REDIRECT EXAMINATION

20 BY MR. BUTLER:

21 Q **Ms. Ousdahl, you were asked by Mr. Rehwinkel**  
22 **a series of question regarding language in Order 12456**  
23 **that includes the phrase "normally recovered through**  
24 **base rates." Do you remember that series of questions?**

25 A Yes.

1           Q     At the time that FPL proposed its investment  
2     in rail cars as a substitute for rail car leases for  
3     delivering coal to the Scherer Plant, were rail cars  
4     normally recovered through electric utility base rates?

5           A     Not to my knowledge.

6           Q     Mr. Rehwinkel also asked you whether Georgia  
7     Power company that's involved as the operator of Plant  
8     Scherer is regulated by the Georgia Public Service  
9     Commission. Do you remember that series of question?

10          A     Yes.

11          Q     Is FPL also involved in a joint venture with  
12     JEA for the SJRPP facility?

13          A     Yes, we are.

14          Q     And is JEA regulated by the Florida Public  
15     Service Commission or any other Public Service  
16     Commission in the same way that Georgia Power is by the  
17     Georgia PSC?

18          A     No. They are a municipal operator.

19          Q     Mr. Rehwinkel also asked you some questions  
20     about the level of expertise and successful efforts in  
21     accounting. Do you recall that?

22          A     Yes.

23          Q     Do you know whether U. S. Gas has expertise  
24     in successful efforts accounting?

25          A     Yes, they do. I've levered the talent, time,

1       attention and training of some of the accounting staff  
2       at U. S. Gas as I will continue to.

3                    MR. BUTLER: If I can have just one second,  
4                    please.

5                    CHAIRMAN GRAHAM: Sure.

6                    MR. BUTLER: That's all the redirect that I  
7       have. Thank you.

8                    CHAIRMAN GRAHAM: Exhibits?

9                    MR. BUTLER: Yes. We would move exhibits --  
10       if I'm remembering correctly, it's 13 through 19.

11                  CHAIRMAN GRAHAM: Any objections to entering  
12       exhibits 13 through 19? Seeing none, we will move  
13       those in. So, I take it No. 20 is redirect?

14                  MR. BUTLER: It is, yes.

15                  CHAIRMAN GRAHAM: Rebuttal, rather.

16                  MR. BUTLER: Yes, rebuttal not redirect.

17                  CHAIRMAN GRAHAM: Intervenors? I don't see  
18       any other exhibits that were offered.

19                  MR. REHWINKEL: Mr. Chairman, I talked to  
20       staff on the break about this. Order 14546 -- I  
21       remembered that there was something weird about it  
22       online. And if you go online and you pull the  
23       order up, it's got an extended area service  
24       telephone order piece involved in it.

25                  So, I would just ask in an abundance of

1 caution, if we could make the copy that we passed  
2 out, which was the Commission's own document, a  
3 part of the record. I'm not trying to break with  
4 tradition or make Ms. Helton mad, but I would just  
5 ask if we could give that document an exhibit  
6 number and move it into the record.

7 CHAIRMAN GRAHAM: I don't have a problem with  
8 that. We would give it Exhibit No. 65. I  
9 appreciate the fact that it may not be something  
10 readily available online, and it's difficult to  
11 get. And if we have it as part of this hearing, it  
12 will be easier to put your hands on it.

13 MR. REHWINKEL: Thank you. I appreciate  
14 that, and I would move it into the record.

15 MS. HELTON: And just to make the record  
16 clear, I have asked Ms. Craig, our administrative  
17 assistant to get in touch with Lexus, because I do  
18 agree, there is something really weird about the  
19 order on Lexus. So, hopefully that can get squared  
20 away for the future.

21 CHAIRMAN GRAHAM: Okay. May Ms. Ousdahl be  
22 excused for the moment?

23 MR. REHWINKEL: Works for me.

24 CHAIRMAN GRAHAM: Dr. Taylor, the last two  
25 witnesses have been talking about you, so welcome.

1                   MR. REHWINKEL: Dr. Taylor has been  
2                   previously sworn.

3                   Whereupon,

4                   DR. TIMOTHY TAYLOR  
5                   was called as a witness, having been previously duly  
6                   sworn, was examined and testified as follows:

7                   DIRECT EXAMINATION

8                   BY MR. REHWINKEL:

9                   Q       Dr. Taylor, would you please state your name  
10                  and business address for the record?

11                  A       Timothy Dale Taylor, 601 Travis, Houston,  
12                  Texas, Suite 1900.

13                  Q       And by whom are you employed and in what  
14                  capacity?

15                  A       NextEra Project Management, gas  
16                  infrastructure as chief technical officer.

17                  Q       Have you prepared and caused to be filed in  
18                  this document 24 pages of prefiled direct testimony?

19                  A       Yes.

20                  Q       On June 25, 2014, in this proceeding?

21                  A       Yes.

22                  Q       Do you have any changes or revisions to that  
23                  testimony today?

24                  A       No.

25                  Q       So, if I ask you the same questions contained

1       **in your direct testimony today, would your answers be**  
2       **the same?**

3           A       Yes.

4                   MR. REHWINKEL: Mr. Chairman, I'd ask that  
5                   Dr. Taylor's prefiled direct testimony be inserted  
6                   into the record.

7                   CHAIRMAN GRAHAM: We'll insert this witness'  
8                   pre-filed direct testimony into the record as a  
9                   witness.

10                  (Whereupon, prefiled testimony was inserted.)

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## I. INTRODUCTION

2

**3 Q. Please state your name and business address.**

4 A. My name is Tim Taylor. My business address is 601 Travis, Suite 1900,  
5 Houston, Texas, 77002.

6 Q. By whom are you employed and what is your position?

7 A. I am employed by NextEra Energy Project Management, LLC, as the Chief  
8 Technology Officer of the Gas Infrastructure and Development business unit  
9 (“Gas Infrastructure”).

10 Q. Please describe your educational background and professional  
11 experience.

12 A. I have been actively involved in the oil and gas industry for over 40 years. I  
13 hold Bachelor of Science, Masters of Science and PhD degrees in Petroleum  
14 Engineering from the University of Texas at Austin. I am a licensed  
15 professional engineer in the state of Texas.

16

17 I have been with Gas Infrastructure since August of 2012. Prior to that, I was  
18 Chief Operating Officer of Texas American Resources. I was also a Professor  
19 in the Petroleum and Geosystems Engineering Department at the University of  
20 Texas at Austin where I taught oil and gas reserve determination and  
21 economics and petrophysics. Prior to that, I was Chief Operating Officer of  
22 SOCO International, plc, an international oil and gas company. I have also  
23 served in various capacities with Snyder Oil Company and Gulf Oil Company

1 and was President and CEO of Taylor, Caudle & Associates, a consulting firm  
2 specializing in reserves and economics. Exhibit TT-1 is a copy of my resume.

3 **Q. Please describe your duties and responsibilities in your current position.**

4 A. As Chief Technology Officer, I am responsible for evaluating oil and gas  
5 acquisition opportunities, supporting operations in evaluating drilling and  
6 lease acquisition proposals from outside operating partners and maintaining  
7 internal reserves and economics database. I am responsible for preparing  
8 internal reserve estimates, using Securities and Exchange Commission  
9 (“SEC”) and Society of Petroleum Engineers reserve definitions and  
10 guidelines.

11 **Q. Are you sponsoring any exhibits in this case?**

12 A. Yes. I am sponsoring the following exhibits which are attached to my direct  
13 testimony:

- 14 • TT-1 Resume of Dr. Timothy D. Taylor
- 15 • TT-2 Difference Between Conventional and Unconventional Natural
- 16 Gas Deposits
- 17 • TT-3 Historic and Projected Growth of Shale Gas Volumes
- 18 • TT-4 “Behind-Pipe” Zones
- 19 • TT-5 Map of the Woodford Shale
- 20 • TT-6 Location Map of the PetroQuest Acreage
- 21 • TT-7 EUR Type Curve Map
- 22 • TT-8 Projected Drill Schedule Map
- 23 • TT-9 Volume Forecast for FPL (confidential)

- 1           • TT-10 Forrest A. Garb & Associates Report (confidential)

2   **Q.     What is the purpose of your testimony in this proceeding?**

3   A.     The purpose of my testimony is to:

- 4           (i)   Provide an overview of the gas production industry as background for  
5                         the proposed investment in gas reserves and the production of natural  
6                         gas in the Woodford Shale region to meet a portion of Florida Power  
7                         and Light Company's ("FPL") natural gas requirements (the  
8                         "Woodford Gas Reserve Project," "Woodford Project" or the  
9                         "Project");
- 10          (ii)   Summarize the volumes of natural gas that can be recovered  
11                         underneath the 19 sections (12,160 acres) in Pittsburg County,  
12                         Oklahoma, operated by PetroQuest Energy, LLC ("PetroQuest") that  
13                         comprise the Woodford Project;
- 14          (iii)   Describe and support the analysis of the production rate at which these  
15                         reserves can be recovered using the drilling schedule provided by  
16                         PetroQuest;
- 17          (iv)   Present the estimate of the total amount of gas that is expected to be  
18                         economically recovered from the Woodford Project, referred to as the  
19                         Estimated Ultimate Recovery ("EUR");
- 20          (v)   Demonstrate the reasonableness of Project estimates in items ii, iii and  
21                         iv above by comparing them to an independent, third party study; and,
- 22          (vi)   Discuss the detailed monthly forecast of volumes of natural gas to be  
23                         recovered from the Project and provided to USG Properties Woodford

1 I, LLC (I will refer to both this entity and Gas Infrastructure as  
2 "USG") and FPL.

3 **Q. Please provide a brief summary of your testimony.**

4 A. My testimony provides an overview of the geology and technology of the gas  
5 production industry relevant to the proposed Woodford Project, including a  
6 description of natural gas and other hydrocarbons, how they are formed, and  
7 how natural gas reserves are categorized. I provide an overview of the  
8 Woodford Shale, where the Woodford Project is located.

9

10 My testimony then examines the reserves recoverable from the wells and  
11 leases operated by PetroQuest that will be part of the Woodford Project. I  
12 discuss the economic analysis that determined the EUR of each existing or to  
13 be drilled well and the detailed monthly volume forecast of these reserves  
14 used for purposes of assessing the Project. This analysis consists of the  
15 following steps: (i) identification of the wells and leases being offered for sale  
16 by PetroQuest, (ii) confirmation that PetroQuest is the operator of record of  
17 the wells and leases being offered, (iii) attainment of records from PetroQuest  
18 relating to working and net revenue interest, historical operating costs,  
19 historical drilling and completion costs, historical production volumes from  
20 existing wells, (iv) construction of production type curves based on nearby  
21 well performance and on the specific producing wells in the acreage being  
22 offered, and (v) inclusion of this information, along with FPL's forecasted gas  
23 pricing, into an oil and gas reserves and economics software model, PHDWin,

1 from which gas volume forecasts were generated. A third-party engineering  
2 firm, Forrest A. Garb & Associates, Inc., was engaged by FPL to perform an  
3 independent analysis.

4

5 Based on the results of my analysis, I conclude that the Project is  
6 economically viable and commercially attractive. I have also provided the  
7 results of my analysis to FPL, which uses it as an input in projecting customer  
8 savings for the Project.

9

10 **II. OVERVIEW OF THE GAS PRODUCTION INDUSTRY**

11

12 **Q. Please provide a brief description of natural gas and explain the  
13 difference between “wet” and “dry” natural gas.**

14 A. Natural gas and other fossil fuels are hydrocarbons. Hydrocarbons are formed  
15 by the decaying remains of plants and animals, mostly microscopic marine  
16 life, from millions of years ago. The physical process in which this organic  
17 matter is converted into hydrocarbons is known as catagenesis, and it occurs  
18 deep within the earth's crust. The pressure and temperature at which  
19 catagenesis occurs will impact the type of hydrocarbons that are formed. For  
20 example, deeper deposits with higher pressure and higher temperature favor  
21 the formation of lighter hydrocarbons (natural gas), while shallower deposits  
22 tend to contain heavier hydrocarbons that are in liquid form (i.e., oil).

1       Natural gas primarily consists of methane, but other, heavier hydrocarbons  
2       such as ethane, propane, butane, and pentane may be present as well. These  
3       heavier hydrocarbons are commonly called natural gas liquids (“NGLs”).  
4       When natural gas contains predominantly methane, it is commonly referred to  
5       as “dry” gas. In reality, there is rarely pure, 100% methane even in “dry gas”  
6       formations, as small amounts of NGLs and other impurities are almost  
7       invariably present. Conversely, natural gas containing significant fractions of  
8       the other previously mentioned hydrocarbons, or NGLs, is commonly referred  
9       to as “wet” gas.

10

11       Upon extraction of wet gas from the well, the entire volume is sent through a  
12       processing facility to separate and capture the NGLs, thus transforming the  
13       “wet” gas into “dry” gas. NGLs collected during processing may require  
14       further processing or separate transport depending on their specific contents.  
15       As I will discuss below, there are markets for the NGLs; thus, the owner of a  
16       gas reserves project will realize value from the extraction and processing of  
17       NGLs as well as methane. The ratio of dry gas to NGLs is one of several  
18       factors in assessing the commercial viability of a formation. In addition to dry  
19       gas and NGLs, it is not uncommon for oil to also be produced simultaneously  
20       from the wells.

21

22

1     **Q.     Describe the gas that is used for purposes of generating electricity in**  
2         **power plants.**

3     A.     Natural gas-fired generation facilities run on pipeline quality dry gas, which is  
4         fed directly into the plant. “Pipeline quality” natural gas has specific  
5         characteristics for heat content, moisture and NGLs and typically requires a  
6         minimum of 85% methane. Pipelines maintain gas quality standards to ensure  
7         the uniformity and usability of the natural gas they transport so that their  
8         customers, including FPL, can operate gas-fired equipment safely and  
9         efficiently.

10    **Q.     What are the different types of underground formations that can contain**  
11         **natural gas?**

12    A.     Historically, the most common formation that was drilled to extract natural  
13         gas has been what is characterized as “conventional.” These formations are  
14         geologic deposits characterized by naturally occurring pockets where natural  
15         gas collects and is trapped by an impervious layer of rock. This natural gas  
16         can be either “associated,” which means it resides in conjunction with an oil  
17         deposit, or “non-associated,” which means there is no oil associated with the  
18         gas deposit.

19  
20         Currently, the fastest growing source of natural gas is from unconventional  
21         formations. The most common unconventional formations are shale gas, tight  
22         gas, and coal-bed methane. These formations are characterized by natural gas  
23         that is trapped in porous rocks that have little permeability and, therefore,

1 cannot usually flow in commercial quantities without special drilling and  
2 completion techniques.

3

4 The graphic provided in Exhibit TT-2, produced by the U.S. Energy  
5 Information Administration (“EIA”), illustrates the difference between  
6 conventional and unconventional natural gas deposits.

7 **Q. How has unconventional shale gas affected the natural gas industry?**

8 A. Advancements in technology related to horizontal drilling and completion  
9 techniques have created access to large deposits of shale gas that were  
10 previously uneconomical to produce. This has rejuvenated the natural gas  
11 industry in the United States, which contains some of the largest shale gas  
12 reserves in the world. Shale gas is the fastest growing source of supply in the  
13 United States over the past 10 years and its emergence has pushed gas prices  
14 to historical lows. Specifically, over that same time frame, the percentage of  
15 shale gas that contributed to domestic production grew from less than 5% to  
16 over 30% of total production. The graph provided in Exhibit TT-3, from the  
17 EIA, depicts the historic and projected growth of shale gas volumes.

18 **Q. What is meant by the term “gas reserves”?**

19 A. Gas reserves represent the quantity of gas than can be economically recovered  
20 from a reservoir (conventional or unconventional). Recoverable gas reserves  
21 do not typically equal 100% of the gas in the reservoir due to variations in  
22 rock quality, porosity, permeability, pressure, the number of wells and their  
23 drainage areas, economic considerations, and other factors. Estimated

1       volumes of gas reserves can change with advancements in technology that can  
2       reduce drilling and operating costs and changes in commodity pricing that  
3       make additional volumes of gas economically recoverable.

4       **Q. What method typically is used to estimate the amount of gas that is**  
5       **physically recoverable from shale reserves?**

6       A. The decline curve analysis method is the most reliable and commonly used  
7       method to estimate recoverable gas from shale reservoirs when abundant  
8       historical production data is available, as is the case for the Woodford Project.

9

10      Decline curve analysis is a reserve estimation method that uses the shape of  
11     the decline in historical production to forecast future volumes of gas by  
12     applying mathematical equations that describe the shape of the decline curve  
13     and the constantly changing rate of decline. These equations are hyperbolic in  
14     nature and this method is, by far, the most accurate in predicting future  
15     production when sufficient historical production is available. While actual  
16     performance can vary from estimates significantly for individual wells,  
17     decline curve analysis has proven very reliable and accurate in predicting the  
18     average performance for wells within a reserve. As will be discussed later in  
19     my testimony, decline curve analysis was used to forecast future reserves  
20     because there are many wells in the PetroQuest area with sufficient historical  
21     production to justify the application of this method. The results of the  
22     methodology are inserted into the economic model that determines the EUR  
23     of the reserves. I will discuss the EUR concept in greater detail below.

**Q. Are gas reserves classified on attributes other than quantity?**

2 A. Yes. In addition to quantifying the amount of gas reserves, companies also  
3 characterize the quality of reserves. In this context, “quality” refers to the  
4 likelihood, based on currently available information, that the full estimated  
5 reserve quantity can be economically produced. The industry uses as its  
6 frame of reference for classifying gas reserves three standard categories  
7 defined by the SEC for public company reporting.

- Proved reserves (“Proved”) are those reserves with reasonable certainty (90% probability) that the predicted quantity of gas can be commercially recoverable under current technical, contractual, economic, and regulatory conditions. This reserve category can be further subdivided into three sub-categories.
    - Proved Developed Producing (“PDP”) reserves are in currently operating wells that have reasonable certainty of continuing production.
    - Proved Developed Non-Producing (“PDNP”) reserves are reserves that have been (i) drilled and completed but not yet producing due to pending pipeline connection, surface facilities or other factors that do not require substantial capital investment relative to drilling the well or, (ii) hydrocarbon bearing zones that are “behind pipe,” which generally means productive zones up the wellbore from the primary completion zone (see Exhibit TT-4). These zones will be equipped for

1 production at some point in the future, typically after the  
2 currently producing zone is depleted.

- Proved Undeveloped (“PUD”) reserves are in well locations in a proved area that require additional capital investment to drill and complete the well in order to extract the gas.
  - Probable reserves (“Probable”) are those reserves with some uncertainty (50% probability) that the predicted quantity can be commercially recoverable under current technical, contractual, economic, and regulatory conditions. These reserves may appear productive by analysis but are outside the areas defined as proved and lack definitive tests.
  - Possible reserves (“Possible”) are those reserves with high uncertainty (10% probability) that the predicted quantity can be commercially recoverable under current technical, contractual, economic, and regulatory conditions. These areas appear to contain hydrocarbons but are outside of the area assumed to be probable.

17 Q. Are projects and transactions involving gas reserves priced solely on the  
18 basis of the three levels of reserve categories in the SEC reporting  
19 requirements?

20 A. No. Projects and transactions involving gas reserves are priced on the basis of  
21 several factors, which I discuss in more detail below. But with regard to the  
22 quality of reserves, obviously there is a range of estimates anywhere from

1       below 10% to more than 90%. The actual estimate, not the SEC category, is  
2       typically used in pricing a transaction.

3       **Q. Can there be substantial value in reserves that are classified as Probable  
4                   and Possible?**

5       A. Definitely. While Proved reserves provide more immediate certainty around  
6       production, there is substantial value in developing projects whose quality of  
7       reserve estimates also include Probable or Possible reserves. The distinction  
8       between the actual categorization of a reserve as Proved, versus Probable or  
9       Possible can be quite narrow and evolve over time. For instance, by SEC  
10      definition, a PUD location may be only one location away from an existing  
11      PDP well. In that instance, the next location away from the PUD location  
12      would be defined as Probable. When the PUD location is drilled, it  
13      immediately gets reclassified as a PDP well. Therefore, by definition, the  
14      adjacent Probable location automatically becomes a PUD location. So, by this  
15      example, we see that the SEC reserve classification applicable to a well can  
16      evolve simply by the normal course of developing a well field.

17

18      In many instances, it is necessary and/or desirable to drill Probable or Possible  
19      locations before they have been converted to PUD locations in order to take  
20      advantage of efficiencies in drilling rig utilization. In other words, if a surface  
21      location is capable of accommodating multiple wells, it would be inefficient to  
22      drill only the PUD locations, move the rig off to wait for production to be  
23      established in those wells, then move the rig back to that location to drill the

1       Probable or Possible locations. In other instances, it would make sense to drill  
2       Probable or Possible locations when there are no adjacent PUD locations, in  
3       order to extend the limits of the field based on geophysical interpretations of  
4       seismic data which would give a high level of confidence that the Probable  
5       wells would perform similarly to the PUD wells. Both of these scenarios  
6       apply to the Woodford Project, where we have three-dimensional seismic data  
7       that covers the entire Area of Mutual Interest (“AMI”) for the Woodford  
8       Project.

9

10      By combining a thorough analysis of available technical data, project  
11     investors make informed decisions on investing in Probable and Possible  
12     reserves based on the economics of the project. Probable and Possible  
13     reserves represent the future growth of a project. As wells are drilled, these  
14     categories get converted to Proved reserves as described above. A typical gas  
15     reserve investment portfolio would appropriately be comprised of a wide  
16     range of projects, including reserves that fall within each of the major SEC  
17     categories of Proved, Probable and Possible.

18   **Q. What are some of the factors that affect the commercial value of shale  
19     formations?**

20   A. Broadly speaking, there are three main factors that determine the value of any  
21     natural gas resource in the marketplace: market value of the commodity, the  
22     amount and composition of the commodities that can be extracted, and the  
23     cost to extract that commodity. Two of these factors, amount and composition

1       of the commodities and cost to extract, will be specific to each shale region  
2       and can be evaluated more granularly.

3

4       Regarding the amount and composition of the commodities, each shale region  
5       contains a unique composition of hydrocarbons. In addition to natural gas and  
6       NGLs, it is possible for oil to coexist in the reservoir which would be  
7       produced along with the natural gas. The volume of NGLs extracted from wet  
8       gas varies according to its composition. When NGLs are present, both the  
9       NGL volumes and the resulting volumes of dry natural gas, after extraction of  
10      the NGLs, are projected and included in an economic analysis.

11

12      Regarding the cost of extracting the commodity, each unconventional resource  
13      has unique geologic or geographic characteristics that will affect economic  
14      value. A particular formation's depth, thickness, and rock type will affect the  
15      capital expenditures ("CapEx") required to drill and complete a well. In  
16      addition, there are ongoing operating expenditures ("OpEx") associated with  
17      the production of the natural gas.

18      **Q. How does the presence of NGLs and/or oil affect the economics of a well?**

19      A. As previously mentioned, NGLs commonly exist as a component of natural  
20      gas. Although NGLs and natural gas are extracted in conjunction with one  
21      another, NGLs have a different set of uses and hence a different market price.  
22      The largest uses of NGLs are in petrochemicals, gasoline components, and  
23      heating. Pricing for NGLs is closely correlated with the price of oil and NGLs

1 usually sell at a percentage of the price of crude oil. Based on current market  
2 pricing, NGLs are trading at a significant premium to natural gas on a unit  
3 equivalent basis. For this reason, many producers have focused their  
4 development efforts on formations that contain a higher concentration of  
5 NGLs. Said another way, the presence of NGLs in the volumes extracted  
6 from a well can effectively lower the per unit cost of the natural gas produced,  
7 as the increased value of NGLs relative to natural gas subsidizes the cost of  
8 producing the natural gas. Similar considerations apply if oil can be extracted  
9 from a well along with natural gas.

10 **Q. Would it be appropriate for FPL to consider future projects in  
11 formations that contain NGLs and/or oil as well as dry gas?**

12 A. Yes. While the Woodford Project is not anticipated to have economically  
13 significant quantities of NGLs or oil, each project opportunity should be  
14 evaluated on its economic merit. For example, because NGLs currently trade  
15 at a premium relative to natural gas, a wet gas project can be economically  
16 viable with lower natural gas production volumes than are needed to justify a  
17 dry gas project. With producers focusing on regions with higher ratios of  
18 NGLs to methane, FPL would be substantially limiting the opportunities with  
19 potential counterparties and may encounter difficulty in executing additional  
20 transactions until the gas price forecast has increased to make dry gas projects  
21 more economical. Moreover, the significant value in NGLs can lower the  
22 effective cost of the methane that is produced. So it would truly depend on  
23 the specifics of the project opportunity.

### **III. OVERVIEW OF WOODFORD SHALE**

2

**Q. Would you please provide a brief description of the Woodford Shale?**

4 A. The Woodford Shale lies underneath most of the state of Oklahoma and  
5 ranges from 50 feet to 300 feet thick. The region of the Woodford Shale in  
6 the Arkoma Basin of southeastern Oklahoma, where the AMI acreage with  
7 PetroQuest is located, covers approximately 2,900 square miles and lies  
8 between 6,000 feet and 13,000 feet beneath the surface. The extent of this  
9 shale in this region is shown in Exhibit TT-5. It is an organic-rich shale of  
10 Devonian age that was deposited about 350 to 400 million years ago. It is  
11 characterized as a low permeability silica-rich shale rock with relatively high  
12 porosity. Porosity controls the amount of gas that can be stored in the rock  
13 and permeability controls the ability of the rock to allow fluid to flow through  
14 the pore spaces (i.e., a measure of the connectivity of the pores). The  
15 Woodford Shale in this region where the AMI acreage is located produces dry  
16 natural gas.

17

18

19 rock for many of the conventional productive deposits. The first gas  
20 production from the Woodford Shale was recorded in 1939 from vertical  
21 wells. The first horizontal wells were drilled in 2004 and today, with the  
22 advent of technological advances in horizontal drilling and completion  
23 methods, there are approximately 2,000 wells producing from the formation.

1 Around 75% of those are horizontal wells. Many oil companies like Devon  
2 Energy, Newfield Exploration, Chesapeake Energy, Antero Resources,  
3 Continental Resources, PetroQuest Energy, XTO Energy and others are  
4 actively drilling the Woodford Shale.

5 Q. Please describe PetroQuest's involvement in the Woodford Shale and  
6 specifically in the AMI for the Woodford Project.

7 A. PetroQuest has drilled over 120 wells in the Woodford Shale and has  
8 established itself as an efficient, low cost developer of natural gas reserves.  
9 The production history from the wells in and around the AMI supports the  
10 application of the decline curve analysis method discussed earlier for the  
11 Woodford Project. The map shown in Exhibit TT-6 shows the 19 sections of  
12 the AMI being offered by PetroQuest. The horizontal lines within these  
13 sections represent individual horizontal wells that have been drilled in this  
14 area of Pittsburg County, Oklahoma. There are 19 horizontal Woodford wells  
15 within the AMI. USG has been a partner of PetroQuest in this area since 2010  
16 and participated in drilling 17 of these wells, the other two having been drilled  
17 before the partnership was formed.

18

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1                   **IV. ASSESSMENT OF WOODFORD PROJECT RESERVES**

2

3                   **Q. Have you evaluated the gas reserves in the Woodford Project?**

4                   A. Yes. I estimated the future volumes of natural gas reserves that could  
5                   reasonably be expected to be recovered from the wells to be drilled in the 19  
6                   sections and provided FPL with a monthly volume forecast.

7                   **Q. Why is it necessary to perform a reserve assessment for the Woodford  
8                   Project?**

9                   A. The assessment of reserve projections is necessary to understand the future  
10                  volumes of natural gas available in order for FPL to make its own assessment  
11                  of the economic viability of the Woodford Project.

12                  **Q. How are reserves for the Woodford Project categorized for the purpose  
13                  of the assessment?**

14                  A. There are 38 remaining horizontal well locations to be drilled in the AMI. Of  
15                  these, 25 are in the PUD reserve category, meaning they are Proved reserves  
16                  that have yet to be drilled but are supported by nearby producing wells. 13 of  
17                  the locations are in the Probable reserve category. However, these locations  
18                  are immediately adjacent to sections that have existing producing wells in the  
19                  AMI. The distribution and performance of the existing wells gives us a high  
20                  level of confidence that the Probable wells will perform similarly to the PUD  
21                  wells.

22

1     **Q. Please describe the reserve assessment that you performed for the**  
2         **Woodford Project.**

3     A. My analysis consisted of the following steps:

- 4             (i) A performance analysis was conducted on the PDP wells in the AMI.  
5                 The production data from these and other wells around the AMI were  
6                 used in our decline curve analysis;
- 7             (ii) The result of the performance analysis indicated that there were  
8                 differing levels of performance for the eastern area of the AMI versus  
9                 the western area of the AMI. Therefore, for PUD and Probable  
10                 reserves, two type curves were constructed, one for each area that  
11                 matched the average performance from the nearby PDP wells;
- 12             (iii) These type curves were then applied to the remaining undrilled  
13                 locations in each type curve area as shown in Exhibit TT-7. This  
14                 exhibit also shows the EURs for each of the 19 existing wells and the  
15                 EURs for the two type curves;
- 16             (iv) The PUD and Probable volume forecasts were fed into PHDWin, an  
17                 industry oil and gas decline curve analysis and economic software  
18                 program. A projected drilling schedule was applied according to the  
19                 drilling schedule shown in Exhibit TT-8, assuming two rigs would be  
20                 utilized to drill all of the wells in the AMI. Both rigs were assumed to  
21                 begin drilling on September 1, 2014. The solid purple lines represent  
22                 the horizontal laterals for the PUD locations and the dashed purple  
23                 lines show the horizontal laterals for the Probable locations.

- 1                 (v) An examination was conducted of PetroQuest's Lease Operating  
2                 Statements, ("LOS") and USG's LOS from the wells in which USG  
3                 and PetroQuest are partners in the AMI. These are industry-standard  
4                 documents prepared by operating companies to capture their monthly  
5                 operating costs, production taxes, transportation fees, and other costs.  
6                 These costs were then fed into PHDWin along with FPL's natural gas  
7                 price forecast supplied;
- 8                 (vi) The resulting economic analysis determined the economic limit of the  
9                 production from each well which, in turn, determined the EUR from  
10                 each well; and
- 11                 (vii) A detailed monthly forecast of the combined volumes of natural gas  
12                 production was then provided to FPL.

13                 This is an industry accepted method of reserve forecasting.

14                 **Q. What is the source of the inputs to your analysis?**

15                 A. The operating costs for the analysis were taken from the actual operating costs  
16                 in PetroQuest's and USG's LOSs. The capital cost for the undrilled wells was  
17                 provided by PetroQuest. Volume projections came from USG's decline curve  
18                 analysis on PDP wells and from the type curve for PUD and Probable wells.  
19                 The drilling schedule came from an internal USG analysis that I performed.  
20                 All these items were deemed reasonable based on our experience in the area.

21                 **Q. What are the results of your analysis?**

22                 A. My analysis shows that the Woodford Project is economically viable. There  
23                 are robust reserves available with a high expectation of natural gas recovery.

1       We determined the average EUR of the undrilled wells in the AMI to be 6.6  
2       BCF/well. Relative to the projected costs for well development, these are  
3       economically attractive volumes. It was assumed that the transfer of  
4       ownership from USG to FPL would occur on January 1, 2015. Using the  
5       drilling schedule described earlier, we combined the production to be  
6       recovered from all wells subsequent to that date into one monthly volume  
7       forecast, as shown in Confidential Exhibit TT-9 and this forecast was  
8       provided to FPL.

9       **Q. Did you also consider an outside consultant's reserve assessments in your  
10      analysis?**

11      A. Yes. In addition to the internal analysis I performed for FPL of all of the  
12      reserves, FPL engaged an independent consulting firm to perform a third-  
13      party analysis. FPL chose Forrest A. Garb & Associates, Inc. ("FGA"), a  
14      trusted engineering firm with experience in the Woodford Shale. The FGA  
15      report is attached as Confidential Exhibit TT-10.

16  
17      The average EUR from the FGA analysis of 6.62 BCF/well is extremely close  
18      to our internal estimate of 6.61 BCF/well and supports the conclusion that the  
19      reserves are economically viable at the levels we estimated.

20

21

22

1 Q. What is your overall conclusion regarding the Woodford Gas Reserve  
2 Project?

3 A. The Woodford Gas Reserve Project is an economically viable and  
4 commercially attractive natural gas recovery project, operated by an industry  
5 leader in this region.

6 Q. Does this conclude your direct testimony?

7 A. Yes.

1 BY MR. REHWINKEL:

2 Q Dr. Taylor, did you also sponsor Exhibits  
3 TT-1 through TT-10 as part of your direct testimony?

4 A Yes.

5 Q Do you have any changes or corrections to  
6 make to those?

7 A No.

8 Q Are they true and correct, to the best of  
9 your knowledge and ability?

10 A Yes.

11 MR. REHWINKEL: I'd just note for the record  
12 that those are identified as 21 through 30 in the  
13 comprehensive staff exhibit list.

14 BY MR. REHWINKEL:

15 Q Dr. Taylor, do you have a summary of your  
16 direct testimony?

17 A I do.

18 Q Would you please give it at this time.

19 A Yes, thank you. Good evening, Mr. Chairman,  
20 Commissioners. I was asked by FPL to conduct an  
21 analysis of the potential reserves that could be  
22 produced from the Woodford Project in the Arkoma Basin  
23 of the Woodford Shale. The Woodford Shale lies  
24 underneath most of the state of Oklahoma.

25 It has been long known by the oil and gas

1 industry that the Woodford Shale is the source rock for  
2 any other hydrocarbon boring zones in the region. The  
3 first production from the Woodford Shale was recorded in  
4 1939 from vertical wells. Since then, there have been  
5 many, many wells drilled in the Woodford Shale.

6 The first horizontal wells were drilled in  
7 approximately 2003. And with the advent of production  
8 from production technology, increases from hydraulic  
9 fracturing and horizontal drilling, there have been more  
10 than 2,000 wells drilled in the Arkoma Basin at this  
11 time. 75 percent of those are horizontal wells.

12 Many oil companies such as Chesapeake Energy,  
13 Newfield, Antara Resources, Continental Resources,  
14 PetroQuest Energy and EXCO Energy and others are active  
15 in the Woodford Shale. The area of mutual interest  
16 acreage as far as FPL's proposed joint venture  
17 partnership with PetroQuest is located in the Arkoma  
18 Basin in southeastern Oklahoma.

19 It covers approximately 2900 square miles and  
20 occurs between 6,000 and 13,000 feet below the surface.  
21 It is characterized as a silica-rich shale rock that was  
22 deposited about 350 to 400 million years ago in the  
23 Devonian period.

24 The rock has relatively high porosity which  
25 controls the storage capacity for gas in the rock but

1 relatively low permeability. The permeability controls  
2 the ability of the rock to allow fluid to flow through  
3 the porous spaces.

4 Production and exploration in the Arkoma  
5 Basin has been going on for decades. An assessment of  
6 the reserve production for FPL's proposed Woodford  
7 Project is necessary to understand the future volumes of  
8 natural gas available. In turn, that information allows  
9 FPL to make its own assessment of the economic viability  
10 of the Woodford Project.

11 FPL's proposed joint venture partner  
12 PetroQuest has drilled over 120 wells in the Arkoma  
13 Basin. To date in the area of mutual interests, there  
14 have been 19 wells drilled in 19 sections.

15 U. S. Gas owns an interest in 17 of those 19  
16 wells. All 19 of those wells are still producing today.  
17 Some of them were drilled as early in 2010. There are  
18 38 remaining locations to be drilled in the area of  
19 mutual interest, all of which are immediately adjacent  
20 to sections that contain producing wells.

21 Thus, these 19 wells have essentially  
22 de-risked the remaining 38 wells to be drilled in the  
23 area of mutual interest. That's because the  
24 distribution and performance of those existing wells  
25 gives us a high level of confidence that we can

1 accurately forecast the production that would come from  
2 those wells.

3                   25 of those 38 wells are in the approved  
4 category and the rest in the probable category. These  
5 are industry-standard classifications that indicate to  
6 us that there is a high probability that the gas  
7 reserves projected will be actually recovered under  
8 current technological, contractual, economic and  
9 regulatory conditions.

10                  Using industry-standard evaluations methods  
11 and based on more than 35 years of experience, I  
12 examined the production from the producing wells in the  
13 area of mutual interest. I determined that two types  
14 curves, one in the east of the AMI and one in the west,  
15 were appropriate for estimating the performance of  
16 future wells to be drilled.

17                  These type two type curves were developed  
18 based on data from the existing wells and were then  
19 applied to the remaining undrilled locations in each  
20 type curve area.

21                  I gathered capital costs, operating costs,  
22 price differentials and other economic data and applied  
23 these to the undrilled locations using PhdWin, an  
24 industry-accepted decline curve analysis and economic  
25 software program.

1                   The resulting economic analysis determined  
2                   the economic upward limit of the production from each  
3                   well and, in turn, determined the estimated ultimate  
4                   recovery which is the estimate of the total amount of  
5                   gas that is expected to be economically recovered from  
6                   the Woodford Project.

7                   From this analysis, I determined the Woodford  
8                   Project to be economically viable. The robust reserves  
9                   available with a high expectation of natural gas  
10                  recovery are then provided to FPL, a forecast of monthly  
11                  volumes from these wells from which they could make  
12                  their own economic analysis.

13                  My results were confirmed by respected  
14                  third-party engineering consulting for Forrest A. Garb &  
15                  Associates. In conclusion, the Woodford Gas Reserve  
16                  Project is an economically viable natural gas recovery  
17                  project operated by an experienced operator, PetroQuest,  
18                  in this region.

19                  That concludes my summary. Thank you.

20                  CHAIRMAN GRAHAM: Thank you, Dr. Taylor. I  
21                  tender the witness for cross examination.

22                  MR. TRUITT: Thank you, Mr. Chairman. John  
23                  Truitt with OPC.

24                   CROSS EXAMINATION

25

1 BY MR. TRUITT:

2 Q Good evening, Dr. Taylor.

3 A Good evening.

4 Q I just have a few questions on direct, not  
5 too much. Now, in your decline curve analysis in your  
6 experience, isn't that correct that generally you  
7 personally want to see from a minimum of several months  
8 to over a year to perform your analysis?

9 A That is correct, although it's different for  
10 each project. But that is, in general, true.

11 Q So, you would agree that there are variances  
12 within place as we saw here in eastern and western?

13 A Sure, there can be variances in place.

14 Q Now, when you take -- let's just use the  
15 hypothetical of a year. I know that's not the case  
16 here, but as a hypothetical for a year, you would take  
17 that information and then extrapolate it out over -- it  
18 could be more than a decade, correct, for a tight curve,  
19 a decline curve?

20 A If that production data has told me the  
21 decline scenario that it's going to assume, then that's  
22 true, yes.

23 Q Now, isn't it true in the analysis of this  
24 Woodford Project you used data from PetroQuest or  
25 publicly-available data, correct?

1           A       Both, yes.

2           Q       And you mentioned the Forrest A. Garb &  
3       Associates that performed an analysis. Isn't it correct  
4       that it's not necessarily an industry standard to engage  
5       a third-party analysis?

6           A       Again, it's an individual preference from the  
7       company that's making the investment as to whether or  
8       not they want to have a third-party analysis. And in  
9       many cases, the third-party consulting analyses are used  
10      and in some they're not.

11          Q       On that --

12           MR. MOYLE: Mr. Chairman, again, I had  
13       indicated I was going to object to this Garb  
14       Report. I don't want to waive the objection.  
15       We'll deal with it when the exhibit comes in, if  
16       that's all right, but I don't want to interrupt the  
17       cross by continuing to object.

18           CHAIRMAN GRAHAM: Sure.

19           MR. MOYLE: Thank you.

20      BY MR. TRUITT:

21          Q       You just stated that depending, sometimes the  
22       company asks for it. Are you aware of any requirement  
23       from the Florida Public Service Commission that there be  
24       a third-party analysis?

25          A       No, I'm not.

1           Q     Do you know of any governing body or  
2     regulatory entity in this matter that requires  
3     third-party analysis?

4           A     In Florida?

5           Q     Anything involving this even in Oklahoma, if  
6     you know that.

7           A     Well, if it's a publicly-traded company, the  
8     SEC requires a report to be filed by a third party.

9           Q     Now, I want to look at your Exhibit TT-10,  
10    the Forrest A. Garb real quick. Do you have that with  
11    you?

12          A     Yes.

13          Q     Now, I understand it's confidential and we  
14    went through this in a deposition, but you're going to  
15    hear me ask the same type questions. I'm asking you to  
16    look at Page 3 of 30 to start with.

17          A     Of the Forrest Garb report?

18          Q     Yes, of your TT-10. It's labeled 3 of 30 in  
19    the top right-hand corner, sir.

20          A     Okay.

21          Q     Second paragraph if you'll look at the last  
22    sentence of the second paragraph starting with the word  
23    "the." You would agree that that statement is correct?

24          A     (Examining document.) The last sentence of  
25    the second paragraph says discounted revenue figures

1 were calculated using a discount factor of 10 percent.

2 MR. BUTLER: Dr. Taylor because this is a  
3 confidential exhibit, let's try to answer sort of  
4 generically his questions. I know that you are not  
5 as familiar with the procedure here, but we're  
6 trying to keep the record as clear of confidential  
7 context as possible.

8 BY MR. TRUITT:

9 Q I'm sorry. To be clear, I'm on Exhibit TT-10  
10 Page 3 of 30 in the top right hand corner. It's in the  
11 second paragraph under the engineering category. At the  
12 bottom of the page you have Page No. 2. So, we've got  
13 two different page numbers on the same thing. That may  
14 be the confusion.

15 I apologize. On to the engineering section,  
16 the second paragraph, last sentence, starts with "the."  
17 Again, it's confidential. I just want to confirm that  
18 you would agree that that sentence is correct.

19 A Yes.

20 Q Okay. Now, I'm going to flip to Page 26 of  
21 30 according to the numbering in the top right-hand  
22 corner. And at the bottom of the page it says  
23 Attachment D-1?

24 A Yes.

25 O Again, confidential. I'm looking at the

1 statements, two sentences contained in No. 5. I'll ask  
2 again: Would you agree that those statements are  
3 correct?

4 A Yes.

5 MR. TRUITT: No further questions.

6 CHAIRMAN GRAHAM: Retail Federation?

7 MR. LAVIA: No questions, Mr. Chairman.

8 MR. MOYLE: I have some questions. I was  
9 hoping I could get some help with an exhibit as  
10 well.

11 CHAIRMAN GRAHAM: Sure. After 6:00 we only  
12 have one staff person.

13 MR. MOYLE: I think everybody has a copy at  
14 this point.

15 CROSS EXAMINATION

16 BY MR. MOYLE:

17 Q Mr. Taylor, I'm showing you what's already in  
18 evidence as response to Interrogatory No. 75. You're  
19 familiar with this; are you not?

20 A No.

21 Q Not in any way, shape or form?

22 A No. I did not prepare this answer.

23 Q There's a table here that talks about the  
24 Woodford costs from 2010 to 2013. You also talk about  
25 the production costs as it relates to the project in

1       **question, correct?**

2           A      Yes.

3           **Q      What are the production costs of the project**  
4       **in question, your projected production costs?**

5           A      Are you referring to the operating costs?

6           **Q      Just the all-in costs that are going to be**  
7       **submitted to Ms. Ousdahl to be included in a fuel clause**  
8       **filing.**

9           A      Those costs are approximately \$2,300 per  
10      month per well plus the water disposal cost.

11          **Q      And can you break that down on a BTU basis?**

12          A      No, sir, that's on a per well basis. Dollars  
13      per well/per month.

14          **Q      So, this exhibit that's in evidence -- I**  
15      **mean, you're not able to even look at it and comment on**  
16      **the fact that at least it appears to show that from 2010**  
17      **to 2013 that the average price of production for the**  
18      **Woodford area was above the NYMEX Henry Hub price?**

19          A      Are these prices? These are not costs.  
20      These are prices.

21          **Q      The question says, "Please refer to Page 6,**  
22      **Paragraph 10, of the petition. For the five-year period**  
23      **of time 2009 to 2013 provide a table comparing the cost**  
24      **of production from Woodford Shale gas reserves to market**  
25      **prices."**

1           A       Well, there are no units on this table, so  
2       I'm not sure what it's referring to. Is that dollars  
3       per MCH?

4                   MR. BUTLER: Mr. Chairman, I'd just like to  
5       note for the record that this interrogatory answer  
6       was sponsored by Mr. Forrest. He would have been  
7       far better suited to answer questions about it than  
8       Dr. Taylor who doesn't have a role in sponsoring  
9       it.

10                  MR. MOYLE: This is my bad on that. I  
11      apologize. I'll try to pick it up with Mr. Forrest  
12      when he comes back up. I'm sorry, Mr. Taylor.

13                  MR. BUTLER: Mary Anne, is that a legal term,  
14      "my bad"?

15                  MS. HELTON: No, but I'm sorry --

16                  MR. MOYLE: I do have another exhibit.  
17      Hopefully, this one will work out better than the  
18      last one.

19                  CHAIRMAN GRAHAM: Mr. Moyle, we'll give this  
20      an exhibit number of 66. Do you have a copy?

21                  MR. MOYLE: Do you have a copy, Mr. Butler?

22                  MR. BUTLER: I do.

23      BY MR. MOYLE:

24                  Q       **Mr. Taylor, I've handed you what I'll**  
25      **represent is an excerpt of the PetroQuest 2013 annual**

1 report, and the excerpt relates to risk factors. We  
2 talked about this in your deposition.

3 Just as a summary, you don't disagree with  
4 any of the risk factors set forth in this exhibit,  
5 correct?

6 A I don't disagree that they've identified  
7 these as potential risks.

8 Q Right. And they made this filing with the  
9 SEC, correct?

10 A That's correct.

11 Q And I want to ask you some questions about  
12 certain of these risk factors, if I could. On Page 28  
13 down towards the bottom and in bold it says, "Operating  
14 hazards may adversely affect our ability to conduct  
15 business." And then they -- the first bulletpoint they  
16 said unexpected drilling conditions including blowouts,  
17 cratering and explosions.

18 We're all kind of new to this oil and gas  
19 business here, and I was hoping that you could help out  
20 with what a blowout is.

21 A A blowout general happens during the drilling  
22 of a well when the pressure in the reservoir exceeds the  
23 mud weight and the hydrostatic head of the mud weight in  
24 the well bore. It blows all the mud out of well bore  
25 while it's being drilled and followed by gas and/or oil.

1           Q     **And I take it that's a bad thing?**

2           A     That's not a good thing, no, sir.

3           Q     **Do people get hurt when that happens?**

4           A     They could, yes, unless they can run, very,  
5     very fast.

6           Q     **And when that's happening, does oil kind of  
7     spill all over the place in an uncontrolled basis to the  
8     extent that there's oil?**

9           A     If it's an oil well, that could certainly  
10    happen, yes.

11          Q     **If it's a gas well, then the gas gets  
12    released kind of in an uncontrolled fashion?**

13          A     Natural gas being lighter than air, it would  
14    go up, yes.

15          Q     **And when we say "natural gas," we're talking  
16    about gas that's 85 percent methane; is that correct?**

17          A     Well, not necessarily. Every natural gas has  
18    a different composition. It could be 85 percent  
19    methane. It could be more or less.

20          Q     **The gas that is used in power plants is  
21    85 percent methane; is that right?**

22          A     Generally, yes, or more.

23          Q     **Methane is a greenhouse gas; is that correct?**

24          A     It is a greenhouse gas. It's the simplest  
25    hydrocarbon.

1           Q       **What's cratering?**

2           A       Cratering could be similar to a sinkhole  
3       where you've extracted fluids from underneath near the  
4       surface, and the surface collapses.

5           Q       **And that could affect production and timing  
6       and cause injury?**

7           A       Yes.

8           Q       **And then there's a reference to explosions.  
9       Sometimes explosions happen with natural gas and oil  
10      drilling.**

11          A       They have happened, although in my  
12      experience, I've never experienced any of these things.

13          Q       **Are you an operator? Have you spent a lot of  
14      time on oil wells?**

15          A       I have, yes.

16          Q       **But I also read in the resume you were a  
17      consultant for a number of years, right?**

18          A       Yes.

19          Q       **How many years did you spend on oil wells or  
20      natural gas wells?**

21          A       During various parts of my career, I worked  
22      in field operations, so really 20 percent of my career.

23          Q       **And then you were doing operations when you  
24      were there?**

25          A       Yes, in the field doing operations; on the

1        rigs directing operations.

2            Q        Down on operational hazards, they also  
3        identified pollution and other environmental risks. Can  
4        you tell us what pollution and other environmental risks  
5        are associated with drilling an oil and natural gas  
6        well?

7            A        Well, if you have the circumstances you  
8        describe earlier where there's a blowout of oil and the  
9        oil got on the surface of the ground, then that would be  
10      pollution. If it got into a fresh water drinking  
11      source, that would be pollution.

12          Q        So, right now, this project is not on  
13      schedule. I think we've established that with other  
14      witnesses, correct?

15          A        That's correct. The drilling did not start  
16      on schedule, but it is on going now.

17          Q        And part of the reason it didn't start on  
18      time is the company, this PetroQuest company, can only  
19      find one rig to drill; is that right?

20          A        They found one rig that was suitable for  
21      operation in this project. They are in the process of  
22      adding another.

23          Q        If you're in the oil and natural gas drilling  
24      business, I would assume you would be able to access a  
25      drilling well. Am I just not understanding it?

1           A       No, I think you're absolutely right. There  
2       are probably a number of drilling rigs out there  
3       available, but we want to get the right rig for the job  
4       that's being done. We don't want to get some rig that's  
5       not suitable for the job being done.

6           Q       **So, is it your testimony that each rig is**  
7       **unique, kind of like a fingerprint?**

8           A       There are certain types of rigs that that  
9       class of rig is unique from other classes of rigs.

10          Q       **How many classes of rigs?**

11          A       I don't know. Many.

12          Q       **So, they are not all unique. It's not like a**  
13       **fingerprint, right?**

14          A       No, you wouldn't want to drill a horizontal  
15       well that has a 5000-foot lateral section with a well  
16       that's only capable of drilling 5000 feet vertically.

17          Q       **So, let me flip you to Page 24 of this**  
18       **exhibit down towards the bottom. Would you please read**  
19       **the last bold section into the record.**

20          A       "Federal and state legislation and regulatory  
21       initiatives relating to oil and natural gas development  
22       and hydraulic fracturing could result in increased costs  
23       and additional operating restrictions or delays."

24          Q       **So, the popular press uses the term**  
25       **"fracking." Is that the same as hydraulic fracturing?**

1           A     Generally, yes.

2           Q     And the first sentence following that says  
3     that this process involves "the injection of water, sand  
4     chemicals under pressure in the rock formations to  
5     enhance oil and natural gas production."

6                   Is that your understanding?

7           A     Yes.

8           Q     When they say "hydraulic," what does  
9     hydraulic reference?

10          A     Water. Hydra.

11          Q     And when they say that chemicals are used,  
12     you're an expert in this. Give me one chemical that's  
13     used.

14          A     I'm not an expert in hydraulic fracturing  
15     composition of the fluids, but generally they are  
16     predominantly water and some other chemical is used for  
17     stabilizing agents.

18          Q     Can you give me an example of what one might  
19     be?

20          A     No, I cannot.

21          Q     And up on the top of this Page 24, there's a  
22     reference to the explosion and the sinking of the Deep  
23     Water Horizon drilling rig and the resulting oil spill  
24     may significantly increase risks, costs and delays. You  
25     don't disagree with that statement, do you?

1           A       I don't disagree that there was a problem  
2       with the Deep Water Horizon in the Gulf of Mexico, a  
3       very different environment than the Woodford Shale.  
4       Much higher pressure and a very different circumstance.

5           Q       **And specifically with respect to that, the**  
6       **company is saying it could increase their risks and**  
7       **their costs and delays. You don't have any reason to**  
8       **disagree with that statement?**

9           A       It certainly increased their costs, yes.

10          Q       **What's the worst accident that you're**  
11       **familiar with with respect to an oil and gas drilling**  
12       **operation on land? The Deep Water Horizon was at sea,**  
13       **right?**

14          A       Yes.

15          Q       **What's the worst accident that you're**  
16       **familiar with with respect to a drilling operation that**  
17       **took place on land?**

18          A       I can't remember a specific example. I've  
19       never been involved with one myself.

20          Q       **With respect to your involvement in the**  
21       **industry, can you --**

22          A       Well, of course, I've heard reports in the  
23       industry of people getting injured on drilling rigs and  
24       even, in some cases, death.

25          Q       **And did you do due diligence on PetroQuest,**

1       **figure out what kind of company they were?**

2           A      Yes.

3           Q      **Did you look at their financials or look at**  
4       **how Moody's rated them?**

5           A      No.

6           Q      **You didn't look at any of their financials?**

7           A      No, it was irrelevant to what I did.

8           Q      **Do you know if anybody looked at their**  
9       **financials?**

10          A      No.

11          Q      All right. I don't want to belabor this, but  
12       there's a number of portions of this document that talk  
13       about cash flow issues and liquidity. It will speak for  
14       itself. You don't have any reason to disbelieve  
15       anything that's set forth in this exhibit, correct?

16          A      I have no knowledge of what's in that exhibit  
17       at all. I haven't read it.

18          Q      **But my question was: You have no reason to**  
19       **doubt anything in here. It's an SEC filing, right?**  
20       **Those are typically true.**

21          A      That's true, but as you and I have discussed  
22       before, many of these risks that they've identified are  
23       boilerplate risks that everybody that's in the oil  
24       industry that's a publicly-traded company is going to  
25       put in their annual report.

1           Q     Right. And I think we talked about it  
2 before. It's because there are real and actual risks  
3 that may -- not necessarily will but they could happen.

4           A     I wouldn't characterize them as real and  
5 actual risk. I would characterize them as potential  
6 risk.

7           Q     So, you also spent time and you looked at a  
8 lot of information with respect to the project in  
9 question that was provided to you by PetroQuest,  
10 correct?

11          A     Yes.

12          Q     Are you aware that PetroQuest in their  
13 contractual documents told USG that they shouldn't rely  
14 on any of the data that was provided by PetroQuest or  
15 words to that effect?

16          A     No, I'm not aware of that.

17          Q     If you were aware of that, would that change  
18 your view?

19          A     I would still rely on the data that I had in  
20 front of me to do the analysis that I did.

21          Q     But maybe less so?

22          A     No, I mean, the data that I get is actual  
23 data. I'll use that data to the purpose that it's  
24 intended. Can I give you an example?

25          Q     I was going to ask you. If I told you to go

1 to the University of Florida, what you need to do is you  
2 need to go out to I-10 and go west, and say don't rely  
3 on my data but go ahead and go west on I-10, that  
4 probably wouldn't work out very well for you since you  
5 got to go east to get to Gainesville.

6 A I'll take your word for that.

7 Q And with respect to representation of  
8 warranties, if a company's affirmatively stating that  
9 you should not rely on any of their information, that  
10 doesn't cause any concern for you?

11 A Without knowing what the context of that  
12 comment was, no.

13 Q Would it help you if I showed it to you?

14 A Sure.

15 MR. MOYLE: Give me a minute, Mr. Chairman.

16 CHAIRMAN GRAHAM: Sure.

17 MR. MOYLE: It's in a confidential document.

18 BY MR. MOYLE:

19 Q So the record is clear, I'm showing you Sam  
20 Forrest, No. 4, Page 65 of 78 and Page 66. There are  
21 some highlights there. And I've starred -- you see a  
22 star down there at the bottom of Page 65?

23 A Yes.

24 Q If you would just read into the record  
25 starting with the sentence following the star until you

1       **get to the star on Page 66.**

2                   MR. YOUNG: Mr. Chairman, I think Mr. Moyle  
3                   just said this is confidential information.

4                   MR. MOYLE: And then I also think in redacted  
5                   version of Mr. Forrest's deposition --

6                   THE WITNESS: I think it was unredacted.

7                   I'll defer to Mr. Butler.

8                   MR. BUTLER: I'd like to see the reference in  
9                   the deposition you are referring to to confirm that  
10                  it's, in fact, not confidential. Do you have a  
11                  page reference, Mr. Moyle?

12                  MR. MOYLE: No, I read it this morning. I  
13                  don't have it, Mr. Butler, but I think -- I'll  
14                  represent to you that the portion about the -- I'll  
15                  look for it.

16                  MR. BUTLER: I'm wondering whether it would  
17                  be faster for us to take a very short break for me  
18                  to confer with the witness and Mr. Forrest and see  
19                  whether we can confirm that this part is okay to do  
20                  non-confidentially.

21                  CHAIRMAN GRAHAM: Sounds like a good time  
22                  to -- the clock behind me says about two after.  
23                  Let's go up to ten after. Seven or eight minutes.

24                  (Brief recess.)

25

1

## C E R T I F I C A T E

2 STATE OF FLORIDA )

3 COUNTY OF LEON )

4 I, LISA GAINY, Court Reporter and Notary Public at  
5 Tallahassee, Florida, do hereby certify as follows:6 THAT I correctly reported in shorthand the  
7 foregoing proceedings, at the time and place as stated  
8 in the caption hereof;9 THAT I later reduced my stenographic notes through  
10 computer-aided transcription, or under my supervision,  
11 to typewritten copy, and that the foregoing pages,  
12 numbered 1 through , both inclusive, contain a full,  
13 true, and correct transcript of the proceedings on said  
14 occasion;15 THAT I am neither of kin nor of counsel to any of  
16 the parties involved in this matter, nor in any manner  
17 interested in the results thereof;

18 THIS 2nd day of December, 2014.

19

20

21



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23

24

25

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LISA GAINY  
Notary Public  
Commission: #EE198942  
Expires May 23, 2016

EXHIBIT NO. \_\_\_\_\_

DOCKET NO: 140001-EI

WITNESS: Deason & Ousdahl

PARTY: Florida Power & Light Company

DESCRIPTION: Order No. PSC-13-0023-S-EI (Excerpt)

DOCUMENTS:

PROFFERED BY: OFFICE OF PUBLIC COUNSEL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for increase in rates by Florida  
Power & Light Company.

DOCKET NO. 120015-EI  
ORDER NO. PSC-13-0023-S-EI  
ISSUED: January 14, 2013

The following Commissioners participated in the disposition of this matter:

RONALD A. BRISÉ, Chairman  
LISA POLAK EDGAR  
ART GRAHAM  
EDUARDO E. BALBIS  
JULIE I. BROWN

ORDER APPROVING REVISED STIPULATION AND SETTLEMENT

BY THE COMMISSION:

Background

On March 19, 2012, pursuant to Section 366.06, Florida Statutes (F.S.), and Rules 25-6.0425 and 25-6.043, Florida Administrative Code (F.A.C.), Florida Power & Light Company (FPL) filed a petition for approval of permanent increase of its base rates and charges. In its petition, FPL requested a base rate increase of \$528 million with a Return on Equity (ROE) of 11.25%, plus a .25% performance adder to remain as long as it maintained the lowest electrical rates in the state compared to the other 4 Investor Owned Utilities. Twelve parties were granted intervention in the docket.<sup>1</sup> However, several parties were dismissed from the docket for various reasons.<sup>2</sup> By the Order Establishing Procedure, Order No. PSC-12-0143-PCO-EI, issued March 26, 2012, the hearing was set to commence on August 20, 2012. In May, June and August, 2012, nine Commission service hearings were held throughout FPL's service territory. On August 15, 2012, FPL and three of the eleven intervening parties filed a Motion to Approve Settlement

<sup>1</sup> Office of Public Counsel (OPC), South Florida Hospital and Healthcare Association (SFHHA), Florida Retail Federation (FRF), Thomas Saporito (Saporito), Florida Industrial Power Users Group (FIPUG), Village of Pinecrest, Federal Executive Agencies (FEA), Glen Gibellina, Larry Nelson, John Hendricks, Algenol Biofuels Inc., and Daniel and Alexandria Larson.

<sup>2</sup> Mr. and Mrs. Larson and Mr. Nelson were dismissed as parties from the docket and their positions on the issues were stricken pursuant to Section VII(a) of Order No. PSC-12-0143-PCO-EI, the Order Establishing Procedure. Section VII(a) provides "[U]nless excused by the Presiding Officer for good cause shown, each party (or designated representative) shall personally appear at the hearing. Failure of a party, or that party's representative, to appear shall constitute waiver of that party's issues, and that party may be dismissed from the proceeding." Both Mrs. Larson and Mr. Nelson subsequently filed Petitions to Re-intervene and Intervene respectively in the supplemental portion of the hearing, and those petitions were denied. Mr. Gibellina was dismissed from the docket for failure to appear at the Prehearing Conference.

DOCUMENT NUMBER • DATE

00264 JAN 14 2013

FPSC-COMMISSION CLERK

Agreement (Settlement Agreement) and a Motion to Suspend the Procedural Schedule.<sup>3</sup> The Motion to Suspend the Procedural Schedule was denied by Order No. PSC-12-0430-PCO-EI, issued August 17, 2012. The technical hearing commenced on August 20, 2012, and lasted 10 days.

On August 27, 2012, Order No. PSC-12-0440-PCO-EI, the Second Order Revising Order Establishing Procedure (Second Order) was issued establishing a procedural schedule for further actions necessary for us to consider the proposed Settlement Agreement. The Second Order stated that upon conclusion of the evidentiary portion of the hearing, a date and time would be set for the sole purpose of taking up the proposed Settlement Agreement. Also, the Second Order gave all parties an opportunity to conduct informal discovery on the proposed Settlement Agreement. On August 31, 2012, we announced that the hearing would reconvene on September 27, 2012, and continue on September 28, 2012, if necessary, to consider the proposed Settlement Agreement. On September 27, 2012, we voted to take additional testimony limited to specific issues that were part of the proposed Settlement Agreement, but supplemental to the issues in the rate case. Accordingly, in compliance with Sections 120.569 and 120.57, F.S., the administrative hearing was continued to November 19-20, 2012.

On October 3, 2012, Order No. PSC-12-0529-PCO-EI, the Third Revised Order Establishing Procedure was issued establishing the necessary procedures for discovery and setting dates for filing prefiled testimony, the Prehearing Conference, and supplemental hearing dates. On November 19 and 20, 2012, the supplemental hearing was held, and on November 30 parties filed post-hearing briefs. On December 13, 2012, we convened a Special Agenda Conference to consider the proposed Settlement Agreement filed by FPL, FIPUG, SFHHA, and FEA. At the Special Agenda we expressed our concerns with the proposed Settlement Agreement. We engaged in an extensive discussion of the benefits and detriments associated with the provisions of the proposed Settlement Agreement, and whether the agreement as filed was in the public interest. Upon completion of our discussion, all the parties (signatories and non-signatories) were given an opportunity to engage in further settlement negotiations. Upon reconvening the Special Agenda Conference, the signatories filed a revised Stipulation and Settlement and the non-signatories reiterated their continued objections to our consideration of the proposed or modified agreement.

By this Order, we approve the revised Stipulation and Settlement (Attachment A). We have jurisdiction over these matters pursuant to Chapter 366, F.S., including Sections 366.04, 366.05, 366.06, 366.07, and 366.076, F.S.

The August 15, 2012 Proposed Settlement Agreement

The major elements of the August 15, 2012 proposed agreement included the following:

---

<sup>3</sup> FPL, FIPUG, FEA, and SFHHA are the signatories to the Settlement Agreement. While Algenol did not execute the Settlement Agreement or join in the motion, it did express its support for the Settlement Agreement. Algenol subsequently withdrew from the proceeding.

- The Term would begin with the first billing cycle of January 2013 and continue through the last billing cycle in December 2016.
- FPL's authorized Return on Equity would be set at 10.70 percent (9.70-11.70 percent range) for all purposes.
- FPL would be authorized to implement a revenue increase of \$378 million effective January 1, 2013. The increase would be based on the projected 2013 test year billing determinants contained in FPL's filed Minimum Filing Requirements.
- FPL's proposed minimum late payment charge of \$5.00 would be increased to \$6.00.
- Demand credits for large commercial and industrial customers in the new CILC and CDR rates would be increased from the credits filed in FPL's MFRs. The increased CILC and CDR credits would be recovered through the energy conservation cost recovery clause (ECCR).
- FPL would not be precluded from petitioning the Commission to seek recovery of costs associated with any storms. Storm cost recovery would begin, on an interim basis, 60 days from the filing of a storm cost recovery petition and associated tariff. Storm cost recovery charges would be assessed over a 12-month period if the costs do not exceed \$4.00/1,000 kWh on a monthly residential customer bill. Storm cost recovery in excess of \$4.00/1,000 kWh would be recovered in a subsequent year or years as determined by the Commission.
- FPL would continue to recover the annual non-fuel revenue requirements for West County Unit 3 through the capacity cost recovery clause in the same manner provided in the 2010 Rate Case Settlement, except that upon the implementation date of the proposed settlement, recovery would no longer be limited to the projected fuel cost savings.
- The revenue requirements associated with West County Unit 3 would be allocated to customer classes based on the cost of service and rate design methodology reflected in FPL's filed MFRS in the current case. Recovery of West County Unit 3's revenue requirements would survive termination of the proposed settlement and would continue until such time as new base rates are authorized for FPL.
- FPL would be allowed three generation base rate increases (GBRA): June 2013 – Canaveral; June 2014 – Riviera; and June 2016 – Port Everglades. FPL would file for each GBRA through the Capacity clause. Each GBRA would be calculated using a 10.70 percent ROE and the capital structure reflected in FPL's MFRs for the Canaveral Step Increase. The proposed settlement provides for a true up to actual capital expenditures if capital costs are lower than projected. FPL would provide any refund through the Capacity Clause and base rates would be adjusted going forward. FPL would be required to initiate a limited proceeding if it chooses to pursue a

revenue increase for higher capital costs. For the Canaveral Modernization Project, the revenue requirement would be based on FPL's current rate petition and MFRs. The Riviera and Port Everglades revenue requirements would be based on the cumulative present value of revenue requirements reflected in the respective need determinations. Each GBRA would be reflected in FPL's customer bills by increasing base charges and base credits by an equal percentage contemporaneously.

- If FPL's achieved ROE falls below 9.70 percent during the term of the settlement on an FPL monthly earning surveillance report stated on an FPSC actual, adjusted basis, FPL could petition the Commission to amend its base rates and may seek interim relief. If FPL's achieved ROE exceeds 11.70 percent during the settlement term on an FPL monthly earning surveillance report stated on an FPSC actual, adjusted basis, any other Party could petition the Commission to amend its base rates and may seek interim relief. This Agreement would terminate upon the effective date of any final order issued in any rate relief proceeding.
- FPL would amortize its projected depreciation reserve surplus and a portion of its fossil dismantlement reserve (termed the "Reserve Amount") over the period of the Agreement, not to exceed \$400 million.
- No depreciation or dismantlement studies would be required to be filed during the Term of the Agreement.
- An Incentive Mechanism would become effective on the implementation date of the Settlement. The Incentive Mechanism involves the sharing of gains resulting from electric wholesale purchases and sales, and asset optimization. Asset optimization involves: gas storage utilization; city-gate gas sales using existing transport; production area gas sales; capacity release of gas transport and electric transmission; and the outsourcing of the optimization function. Annually, as part of the fuel cost recovery clause, FPL would file a final true-up schedule showing its gains in the prior calendar year on short-term wholesale sales, short-term wholesale purchases, and all forms of asset optimization it undertook in that calendar year. FPL customers would receive 100 percent of the gain from electric wholesale sales and purchases and asset optimization up to a threshold of \$36 million ("Customer Savings Threshold.") FPL customers would also receive 100 percent of the gain for the first \$10 million above the Customer Savings Threshold (termed "Additional Customer Savings"). Incremental gains above the Customer Savings Threshold and the Additional Customers Savings (totaling \$46 million) would be shared between FPL and customers as follows:
  1. Between \$46 million and \$75 million, customers receive 30 percent of the incremental gains;
  2. Between \$75 and \$100 million, customers receive 40 percent of the incremental gains.

3. Over \$100 million, customers receive 50 percent of the incremental gains.

The customers' portion of all gains would be reflected as a reduction to fuel costs recovered through the Fuel Clause. FPL would be entitled to recover through the Fuel Clause reasonable and prudent incremental O&M costs incurred in implementing its expanded short-term wholesale purchases and sales programs and asset optimization measures. Such costs include: incremental personnel costs, software and associated hardware costs. In addition, variable power plant O&M costs incurred to generate additional output in order to make wholesale sales, if the level of sales exceeds 514,000 MWh.

Decision

At the Special Agenda Conference, we expressed our concerns with the proposed Settlement Agreement. We engaged in an extensive discussion of the benefits and detriments associated with provisions of the proposed Settlement Agreement, and whether the agreement as filed was in the public interest. Upon completion of our discussion, all parties were given an opportunity to engage in further settlement negotiations. Upon reconvening the Special Agenda Conference, the signatories filed a revised Stipulation and Settlement and the non-signatories reiterated their continued objections to our consideration of the proposed and modified agreements. The modified agreement incorporates changes based upon our extensive discussion. The changes are discussed below.

- FPL's authorized Return on Equity was reduced to 10.50 percent from 10.70 percent for all purposes.
- The revenue increase was reduced from \$378 million to \$350 million effective January 1, 2013. The increase is based on the projected 2013 test year billing determinants contained in FPL's filed Minimum Filing Requirements. We note that \$18 million of the reduction in the requested revenue shall be allocated directly to the base customer and energy charges for the residential rate class only.
- FPL's minimum late payment charge was reduced from \$6.00 to \$5.00 as originally requested in FPL's MFRs.
- FPL shall be allowed three generation base rate increases (GBRA): June 2013 – Canaveral, June 2014 – Riviera, and June 2016 – Port Everglades. FPL will file for each GBRA through the Capacity clause. Each GBRA will be calculated using a 10.50 percent ROE, instead of 10.70 as originally proposed, and using the capital structure reflected in FPL's MFRs for the Canaveral Step Increase. The settlement provides for a true up to actual capital expenditures if capital costs are lower than projected. FPL will provide any refund through the Capacity Clause and base rates will be adjusted going forward. It will be FPL's obligation to initiate a limited proceeding if it chooses to pursue a revenue increase for higher

capital costs. For the Canaveral Modernization Project, the revenue requirement will be based on FPL's current rate petition and MFRs. The Riviera and Port Everglades revenue requirements will be based on the cumulative present value of revenue requirement reflected in the respective need determinations. Each GBRA will be reflected in FPL's customer bills by increasing base charges and base credits by an equal percentage contemporaneously. FPL shall calculate and submit for our staff's administrative approval the amount of the GBRA for each modernization project using the Capacity Clause projection filing for the year that each modernization plant is to go into service. These filing shall include revised tariff sheets for the year that each modernization plant is to go into commercial service.

- If FPL's achieved ROE falls below 9.50 percent, instead of 9.70 percent as originally proposed, during the term of the settlement on an FPL monthly earning surveillance report stated on an FPSC actual, adjusted basis, FPL may petition the Commission to amend its base rates and may seek interim relief. If FPL's achieved ROE exceeds 11.50 percent during the term of the settlement on an FPL monthly earning surveillance report stated on an FPSC actual, adjusted basis, any other Party may petition the Commission to amend its base rates and may seek interim relief. This Agreement terminates upon the effective date of any final order issued in any rate relief proceeding.
- An Incentive Mechanism will become effective on the implementation date of the revised Stipulation and Settlement. This is a four-year pilot program. The Commission has the option to review this pilot program after two years. Upon review, if the Commission determines that the pilot program is not providing the kinds of benefits that it anticipated or if the Commission determines the pilot program is not satisfactory, the Commission may terminate this pilot program. The Incentive Mechanism involves the sharing of gains resulting from electric wholesale purchases and sales, and asset optimization. Asset optimization involves: gas storage utilization; city-gate gas sales using existing transport; production area gas sales; capacity release of gas transport and electric transmission; and the outsourcing of the optimization function. Annually, as part of the fuel cost recovery clause, FPL will file a final true-up schedule showing its gains in the prior calendar year on short-term wholesale sales, short-term wholesale purchases, and all forms of asset optimization it undertook in that calendar year. FPL customers will receive 100 percent of the gain from electric wholesale sales and purchases and asset optimization up to a threshold of \$36 million ("Customer Savings Threshold"). FPL customers will also receive 100 percent of the gain for the first \$10 million above the Customer Savings Threshold (termed "Additional Customer Savings"). Incremental gains above the Customer Savings Threshold and the Additional Customers Savings (totaling \$46 million) will be shared between FPL and customers as follows:

1. Between \$46 million and \$100 million, customers receive 40 percent of the incremental gains.
2. Over \$100 million, customers receive 50 percent of the incremental gains.

The customers' portion of all gains will be reflected as a reduction to fuel costs recovered through the Fuel Clause. FPL will be entitled to recover through the Fuel Clause reasonable and prudent incremental O&M costs incurred in implementing its expanded short-term wholesale purchases and sales programs and asset optimization measures. Such costs include: incremental personnel costs, software, and associated hardware costs. In addition, variable power plant O&M costs incurred to generate additional output in order to make wholesale sales will be included if the level of sales exceeds 514,000 MWh.

We note that with respect to the GBRA, we find that it is the public interest because it provides a benefit to both FPL's customers and FPL. We already approved the need for the Canaveral, Riviera, and Port Everglades Modernization Projects when we considered FPL's need determination petitions. The GBRA provides the mechanism for FPL to recover the costs to modernize these plants and bring them into commercial service. We also find that the pilot incentive mechanism is in the public interest. The pilot incentive mechanism is beneficial to both FPL's customers and FPL. We note that this is a four-year pilot program and we have the option to review it after two years. If we determine that the program is not providing the kinds of benefits that are anticipated, or if we determine the pilot program is otherwise unsatisfactory, we may terminate the program.

Settlement agreements are approved if we determine that they are in the public interest.<sup>4</sup> The public interest standard that we apply in approving the revised Stipulation and Settlement requires a fact-intensive, case-specific analysis. Having carefully reviewed the evidence in the record, and having discussed the benefits and detriments associated with the revised Stipulation and Settlement, we find that as a whole the settlement is in the public interest. It provides a reasonable resolution of all the issues in this proceeding regarding FPL's rates and charges. It also provides FPL's customers with stability and predictability with respect to their electricity rates, while allowing FPL to maintain the financial strength to make investments necessary to

<sup>4</sup> Order No. PSC-11-0089-S-EI, issued February 1, 2011, in Docket Nos. 080677 and 090130, In re: Petition for increase in rates by Florida Power & Light Company and In re: 2009 depreciation and dismantlement study by Florida Power & Light Company; Order No. PSC-13-0023-S-EI/PSC-10-0398-S-EI, issued June 18, 2010, in Docket Nos. 090079-EI, 090144-EI, 090145-EI, 100136-EI, In re: Petition for increase in rates by Progress Energy Florida, Inc., In re: Petition for limited proceeding to include Bartow repowering project in base rates, by Progress Energy Florida, Inc., In re: Petition for expedited approval of the deferral of pension expenses, authorization to charge storm hardening expenses to the storm damage reserve, and variance from or waiver of Rule 25-6.0143(1)(c), (d), and (f), F.A.C., by Progress Energy Florida, Inc., and In re: Petition for approval of an accounting order to record a depreciation expense credit, by Progress Energy Florida, Inc.; Order No. PSC-05-0945-S-EI, issued September 28, 2005, in Docket No. 050078-EI, In re: Petition for rate increase by Progress Energy Florida, Inc..

ORDER NO. PSC-13-0023-S-EI

DOCKET NO. 120015-EI

PAGE 8

provide customers with safe and reliable power. All stipulated issues that were approved in this docket on August 31, 2012, are superseded by our approval of the revised Stipulation and Settlement.

We find, therefore, consistent with our ongoing authority and obligation, that the revised Stipulation and Settlement establishes rates that are fair, just, and reasonable in the public interest. We have a long history of encouraging settlements that are in the public interest, and we believe it is appropriate to do so in this case as well.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the revised Stipulation and Settlement filed December 13, 2013, which is attached hereto as Attachment A and incorporated herein by reference, is approved. It is further

ORDERED that FPL shall file for our staff's administrative approval revised tariff sheets to reflect the terms of the revised Stipulation and Settlement. It is further

ORDERED that FPL shall calculate and submit for our staff's administrative approval the amount of the GBRA for each modernization project using the Capacity Clause projection filing for the year that each modernization plant is to go into commercial service. These filing shall include revised tariff sheets for the year that each modernization plant is to go into commercial service. It is further

ORDERED that Docket No. 120015-EI shall be closed.

By ORDER of the Florida Public Service Commission this 14th day of January, 2013.



ANN COLE  
Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399  
(850) 413-6770  
[www.floridapsc.com](http://www.floridapsc.com)

Copies furnished: A copy of this document is provided to the parties of record at the time of issuance and, if applicable, interested persons.

KY

NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Any party adversely affected by the Commission's final action in this matter may request: 1) reconsideration of the decision by filing a motion for reconsideration with the Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, within fifteen (15) days of the issuance of this order in the form prescribed by Rule 25-22.060, Florida Administrative Code; or 2) judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or the First District Court of Appeal in the case of a water and/or wastewater utility by filing a notice of appeal with the Office of Commission Clerk, and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days after the issuance of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Petition for increase in rates by )  
Florida Power & Light Company. )  
)

Docket No. 120015-EI

**STIPULATION AND SETTLEMENT**

WHEREAS, Florida Power & Light Company ("FPL" or the "Company"), the Florida Industrial Power Users Group ("FIPUG"), the South Florida Hospital and Healthcare Association ("SFHHA") and the Federal Executive Agencies ("FEA") have signed this Stipulation and Settlement (the "Agreement"; unless the context clearly requires otherwise, the term "Party" or "Parties" means a signatory to this Agreement); and

WHEREAS, on February 1, 2011, the Florida Public Service Commission ("FPSC" or "Commission") entered Order No. PSC-11-0089-S-EI approving a stipulation and settlement of FPL's rate case in Docket Nos. 080677-EI and 090130-EI, which continues in effect through the last billing cycle in December 2012 (the "2010 Rate Case Stipulation"); and

WHEREAS, on March 19, 2012, FPL petitioned the Commission for an increase in base rates of approximately \$516.5 million to be effective on January 1, 2013 following the expiration of the 2010 Rate Case Stipulation, for a step increase of \$173.9 million to be effective upon the commercial in-service date of the Canaveral Modernization Project (scheduled to be June 1, 2013), and for other related relief (the "2012 Rate Petition"); and

WHEREAS, the Parties have filed voluminous prepared testimony with accompanying exhibits and conducted extensive discovery; and

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WHEREAS, the Parties recognize that this is a period of substantial economic uncertainty, in which economic development and job creation are vitally important to the state of Florida; and

WHEREAS, the Parties to this Agreement have undertaken to resolve the issues raised in these proceedings so as to maintain a degree of stability and predictability with respect to FPL's base rates and charges, as well as to promote economic development, job creation and stability;

NOW THEREFORE, in consideration of the foregoing and the covenants contained herein, the Parties hereby stipulate and agree:

1. This Agreement will become effective on the first billing cycle of January 2013 (the "Implementation Date") and continue through the last billing cycle in December 2016 (the period from the Implementation Date through the last billing cycle in December 2016 may be referred to herein as the "Term").
2. FPL's authorized rate of return on common equity ("ROE") shall be a range of 9.50% to 11.50%, with a mid-point of 10.50%. FPL's authorized ROE range and mid-point shall be used for all purposes during the Term.
3. (a) Upon the Implementation Date and effective with the first billing cycle in January 2013, FPL shall increase its base rates and service charges by an amount that is intended to generate an additional \$350 million of annual revenues, based on the projected 2013 test year billing determinants reflected in the Minimum Filing Requirements ("MFRs")

filed with the 2012 Rate Petition, and in the respective amounts and manner shown on Exhibit A, attached hereto.

(b) Attached hereto as Exhibit B are tariff sheets for new base rates and service charges that implement the \$350 million rate increase described in Paragraph (3)(a) above, which tariff sheets shall become effective on the first billing cycle of January 2013. The new base rates reflected in the attached tariff sheets are based on the billing determinants, cost of service allocations and rate design in the MFRs accompanying the 2012 Rate Petition and include additional adjustments, all of which are reflected in Exhibit A; provided, however, that: (i) the allocation of revenue responsibility for the base customer and energy charges for the residential rate class (i.e., RS(T)-1) shall be reduced by an additional \$18 million; (ii) the minimum late payment charge shall be \$5.00; and (iii) consistent with FPL's recently approved revised Economic Development Rider and to promote further economic development and job creation, (A) the energy and demand charges for business and commercial rates are adjusted as shown in Exhibit B, and (B) the utility-controlled demand credits for large commercial and industrial customers in the new CILC and CDR rates are greater than the credits reflected in such MFRs, and the relationship between the non-fuel energy and demand charges in the CILC rates are revised. FPL shall be entitled to recover the increased CILC and CDR credits through the energy conservation cost recovery ("ECCR") clause.

(c) Base rates set in accordance with this Paragraph 3 shall not be changed during the Term except as otherwise permitted in this Agreement.

4. Nothing in this Agreement shall preclude FPL from requesting the Commission to approve the recovery of costs that are recoverable through base rates under the nuclear cost recovery statute, Section 366.93, Florida Statutes, and Commission Rule 25-6.0423, F.A.C. Parties may participate in nuclear cost recovery proceedings and proceedings related thereto and may oppose FPL's requests.
5. (a) Nothing in this Agreement shall preclude FPL from petitioning the Commission to seek recovery of costs associated with any storms without the application of any form of earnings test or measure and irrespective of previous or current base rate earnings or level of theoretical depreciation reserve. Consistent with the rate design method set forth in Order No. PSC-06-0464-FOP-EI, the Parties agree that recovery of storm costs from customers will begin, on an interim basis, sixty days following the filing of a cost recovery petition and tariff with the Commission and will be based on a 12-month recovery period if the storm costs do not exceed \$4.00/1,000 kWh on monthly residential customer bills. In the event the storm costs exceed that level, any additional costs in excess of \$4.00/1,000 kWh shall be recovered in a subsequent year or years as determined by the Commission. All storm related costs subject to interim recovery under this Paragraph 5 shall be calculated and disposed of pursuant to Commission Rule 25-6.0143, F.A.C., and will be limited to costs resulting from a tropical system named by the National Hurricane Center or its successor, to the estimate of incremental costs above the level of storm reserve prior to the storm and to the replenishment of the storm reserve to the level as of the Implementation Date. The Parties to this Agreement are not precluded from participating in any such proceedings and opposing the amount of FPL's claimed

costs but not the mechanism agreed to herein.

(b) The Parties agree that the \$4.00/1,000 kWh cap in this Paragraph 5 will apply in aggregate for a calendar year; provided, however, that FPL may petition the Commission to allow FPL to increase the initial 12 month recovery beyond \$4.00/1,000 kWh in the event FPL incurs in excess of \$800 million of storm recovery costs that qualify for recovery in a given calendar year, inclusive of the amount needed to replenish the storm reserve to the level that existed as of the Implementation Date. All Parties reserve their right to oppose such a petition.

(c) The Parties expressly agree that any proceeding to recover costs associated with any storm shall not be a vehicle for a "rate case" type inquiry concerning the expenses, investment, or financial results of operations of the Company and shall not apply any form of earnings test or measure or consider previous or current base rate earnings or level of theoretical depreciation reserve.

6. Nothing shall preclude the Company from requesting the Commission to approve the recovery of costs (a) that are of a type which traditionally and historically would be, have been, or are presently recovered through cost recovery clauses or surcharges, or (b) that are incremental costs not currently recovered in base rates which the Legislature or Commission determines are clause recoverable subsequent to the approval of this Agreement. It is the intent of the Parties in this Paragraph 6 that FPL not be allowed to recover through cost recovery clauses increases in the magnitude of costs of types or categories (including but not limited to, for example, investment in and maintenance of transmission assets) that have been and traditionally, historically, and ordinarily would be

recovered through base rates. It is further the intent of the Parties to recognize that an authorized governmental entity may impose requirements on FPL involving new or atypical kinds of costs (including but not limited to, for example, requirements related to cybersecurity or the requirements for seismic and flood protection at nuclear plants arising out of the Fukushima Daiichi event), and concurrently or in connection with the imposition of such requirements, the Legislature and/or Commission may authorize FPL to recover those related costs through a cost recovery clause. Nothing in this Agreement shall affect the shifts from clause to base rate recovery and from base rate to clause recovery that were set forth in the 2012 Rate Petition and accompanying MFRs.

7.
  - (a) FPL will continue throughout the Term to recover the annual non-fuel revenue requirements for West County Unit 3 via its capacity cost recovery clause (the "Capacity Clause") in the manner provided in the 2010 Rate Case Stipulation; provided, however, that commencing upon the Implementation Date, such recovery shall not be limited to the projected fuel cost savings for West County Unit 3.
  - (b) The revenue requirements associated with West County Unit 3 quantified pursuant to this paragraph shall be allocated to customer classes utilizing the same cost of service and rate design methodology reflected in the MFRs accompanying the 2012 Rate Petition.
  - (c) FPL's right to recover the non-fuel revenue requirements for West County Unit 3 pursuant to this Paragraph 7 shall survive termination of this Agreement and shall continue until such time as new base rates are authorized for FPL that are based on a test

year that reflects the then applicable non-fuel revenue requirements for West County Unit

3.

8. (a) FPL projects that the following three power plant modernization projects will enter commercial service while this Agreement is in effect: the Canaveral Modernization Project (projected to go into service June 2013), the Riviera Modernization Project (projected to go into service June 2014), and the Port Everglades Modernization Project (projected to go in service June 2016). For each of these three modernization projects, FPL's base rates will be increased by the annualized base revenue requirement for the first 12 months of operation (the "Annualized Base Revenue Requirement"). For the Canaveral Modernization Project, the Annualized Base Revenue Requirement shall be as reflected in the 2012 Rate Petition and accompanying MFRs; for the Riviera and Port Everglades Modernization Projects, the Annualized Base Revenue Requirement shall reflect the costs upon which the cumulative present value of revenue requirements was predicated, and pursuant to which a need determination was granted by the Commission. Each such base rate adjustment will be referred to as a Generation Base Rate Adjustment ("GBRA").  
(b) Each GBRA is to be reflected on FPL's customer bills by increasing base charges and base credits by an equal percentage contemporaneously. The calculation of the percentage change in rates is based on the ratio of the jurisdictional Annualized Base Revenue Requirement and the forecasted retail base revenues from the sales of electricity (excluding West County Unit 3 revenues) during the first twelve months of operation.

FPL will begin applying the incremental base rate charges and base credits for each of the three modernization projects to meter readings made on and after the commercial in-service date of that modernization project.

(c) Each GBRA will be calculated using a 10.50% ROE and the capital structure reflected in the Canaveral Step Increase MFRs accompanying the 2012 Rate Petition. FPL will calculate and submit for Commission confirmation that amount of the GBRA for each modernization project using the Capacity Clause projection filing for the year that modernization project is to go into service.

(d) In the event that the actual capital expenditures are less than the projected costs used to develop the initial GBRA factor, the lower figure shall be the basis for the full revenue requirements and a one-time credit will be made through the Capacity Clause. In order to determine the amount of this credit, a revised GBRA Factor will be computed using the same data and methodology incorporated in the initial GBRA factor, with the exception that the actual capital expenditures will be used in lieu of the capital expenditures on which the Annualized Base Revenue Requirement was based. On a going forward basis, base rates will be adjusted to reflect the revised GBRA factor. The difference between the cumulative base revenues since the implementation of the initial GBRA factor and the cumulative base revenues that would have resulted if the revised GBRA factor had been in-place during the same time period will be credited to customers through the Capacity Clause with interest at the 30-day commercial paper rate as specified in Rule 25-6.109, F.A.C.

(e) In the event that actual capital costs for a modernization project are higher than the projection on which the Annualized Base Revenue Requirement was based, FPL at its

option may initiate a limited proceeding per Section 366.076, Florida Statutes, limited to the issue of whether FPL has met the requirements of Rule 25-22.082(15), P.A.C. If the Commission finds that FPL has met the requirements of Rule 25-22.082(15), then FPL shall increase the GBRA by the corresponding incremental revenue requirement due to such additional capital costs. However, FPL's election not to seek such an increase in the GBRA shall not preclude FPL from booking any incremental costs for surveillance reporting and all regulatory purposes subject only to a finding of imprudence or disallowance by the Commission. Any Party may participate in any such limited proceeding for the purpose of challenging whether FPL has met the requirements of Rule 25-22.082(15).

(f) Upon expiration or termination of this Agreement, FPL's base rate levels, including the effects of the GBRAAs as implemented in this Agreement (i.e., uniform percent increase for all rate classes applied to base revenues) for each of the modernization projects that achieved commercial in-service operation during the term of this Agreement, shall continue in effect until next reset by the Commission.

9. (a) Notwithstanding Paragraph 3 above, if FPL's earned return on common equity falls below 9.50% during the Term on an FPL monthly earnings surveillance report stated on an FPSC actual, adjusted basis, FPL may petition the FPSC to amend its base rates, either as a general rate proceeding under Sections 366.06 and 366.07, Florida Statutes, and/or as a limited proceeding under Section 366.076, Florida Statutes. (Throughout this Agreement, "FPSC actual, adjusted basis" and "actual adjusted earned return" shall mean

results reflecting all adjustments to FPL's books required by the Commission by rule or order, but excluding pro forma, weather-related adjustments.) If FPL files a petition to initiate a general rate proceeding pursuant to this provision, FPL may request an interim rate increase pursuant to the provisions of Section 366.071, Florida Statutes. The other Parties to this Agreement shall be entitled to participate in any proceeding initiated by FPL to increase base rates pursuant to this paragraph, and may oppose FPL's request.

(b) Notwithstanding Paragraph 3 above, if FPL's earned return on common equity exceeds 11.50% during the Term on an FPL monthly earnings surveillance report stated on an FPSC actual, adjusted basis, any other Party shall be entitled to petition the Commission for a review of FPL's base rates. In any case initiated by FPL or any other Party pursuant to this paragraph, all parties will have full rights conferred by law.

(c) Notwithstanding Paragraph 3 above, this Agreement shall terminate upon the effective date of any final order issued in any such proceeding pursuant to this Paragraph 9 that changes FPL's base rates prior to the last billing cycle of December 2016.

(d) This Paragraph 9 shall not (i) be construed to bar or limit FPL to any recovery of costs otherwise contemplated by this Agreement; (ii) apply to any request to change FPL's base rates that would become effective after this Agreement terminates; or (iii) limit any Party's rights in proceedings concerning changes to base rates that would become effective subsequent to the termination of this Agreement to argue that FPL's authorized ROE range should be different than 9.50% to 11.50%.

10. (a) In Order No. PSC-10-0153-FOF-EI, the Commission determined a net theoretical depreciation reserve surplus in the total amount of \$894 million (the "Total Depreciation"

Reserve Surplus"). The Commission directed FPL to amortize the Total Depreciation Reserve Surplus over four years, ending in 2013. Pursuant to the 2010 Rate Case Stipulation, the Parties therein agreed that in each year during the term of that agreement, FPL would have discretion to vary the amount of amortization of Total Depreciation Reserve Surplus taken in that year, subject to certain limitations. As a result of FPL's actual and projected discretionary amortization during 2010-2012, the 2012 Rate Petition and accompanying MFRs projected that FPL would have \$191 million of Total Depreciation Reserve Surplus remaining at the end of 2012 and would amortize that amount in 2013. The actual remaining amount may differ from the projected amount of \$191 million.

(b) Notwithstanding Order No. PSC-10-0153-FOF-EI or the 2010 Rate Case Stipulation, the Parties agree that over the Term of this Agreement, FPL may amortize the Total Depreciation Reserve Surplus remaining at the end of 2012, plus a portion of FPL's Fossil Dismantlement Reserve (together the "Reserve Amount") with the amounts to be amortized in each year of the Term left to FPL's discretion subject to the following conditions: (i) the amount of Total Depreciation Reserve Surplus that FPL may amortize during the term shall not be less than \$191 million (or the actual amount of Total Depreciation Reserve Surplus remaining at the end of 2012) and the total Reserve Amount amortized during the Term shall not exceed \$400 million<sup>1</sup> subject to (iii) below; (ii) for any surveillance reports submitted by FPL during the Term on which its return on equity (measured on an FPSC actual, adjusted basis) would otherwise fall below 9.50%,

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<sup>1</sup> The Company would record the \$191 million of net surplus amortization or the actual amount of Total Depreciation Reserve Surplus remaining at the end of 2012, to the cost of removal component of the depreciation reserve to ensure that the amount of net surplus amortization on the financial statements equals the amount of net surplus amortization reflected in rates.

FPL must amortize at least the amount of the available Reserve Amount necessary to maintain in each such 12-month period a return on equity of 9.50% (measured on an FPSC actual, adjusted basis); and (iii) FPL may not amortize Reserve Amount in an amount that results in FPL achieving a return on equity of greater than 11.50% (measured on an FPSC actual, adjusted basis) in any such 12-month period as measured by surveillance reports submitted by FPL during the Term. FPL shall not satisfy the requirement of Paragraph 9 that its actual adjusted earned return on equity must fall below 9.50% on a monthly surveillance report before it may initiate a petition to increase base rates during the Term unless FPL first uses any of the Reserve Amount that remains available for the purpose of increasing its earned return on equity to at least 9.50% for the period in question.

11. Notwithstanding any requirements of Rules 25-6.0436 and 25-6.04364, F.A.C., FPL shall not be required during the Term to file any depreciation study or dismantlement study. The depreciation rates and dismantlement accrual rates in effect as of the Implementation Date shall remain in effect throughout the Term. The Parties agree that the provisions of Rules 25-6.0436 and 25-6.04364 pursuant to which depreciation and dismantlement studies are generally filed at least every four years will not apply to FPL during the Term.
12. (a) In order to create additional value for customers by FPL engaging in both wholesale power purchases and sales, as well as all forms of asset optimization, the Parties agree that FPL will be subject to the following mechanism, effective on the Implementation Date (the "Incentive Mechanism"):

- (i) FPL will file each year as part of its fuel cost recovery clause ("Fuel Clause") final true-up filing a schedule showing its gains in the prior calendar year on short-term wholesale sales, short-term wholesale purchases (including purchases that are reported on Schedule A-7), and all forms of asset optimization that it undertook in that year (the "Total Gains Schedule").<sup>2</sup> FPL's final true-up filing will include a description of each asset optimization measure for which gain is included on the Total Gains Schedule for the prior year, and such measures shall be subject to review by the Commission to determine that they are eligible for inclusion in the Incentive Mechanism.
- (ii) For the purposes of the Incentive Mechanism, "asset optimization" includes but is not limited to:

- Gas storage utilization (FPL could release contracted storage space or sell stored gas during non-critical demand seasons);
- Delivered city-gate gas sales using existing transport (FPL could sell gas to Florida customers, using FPL's existing gas transportation capacity during periods when it is not needed to serve FPL's native load);
- Production (upstream) area sales (FPL could sell gas in the gas-production areas, using FPL's existing gas transportation capacity during periods when it is not needed to serve FPL's native load);

<sup>2</sup> For the purpose of this Agreement, "short-term" is intended to refer to non-separated wholesale sales and purchases. Order No. PSC-97-0262-FOF-EI defined "non-separated" sales as "sales that are non-firm or less than one year in duration."

- Capacity Release of gas transport and electric transmission (FPL could sell idle gas transportation and/or electric transmission capacity for short periods when it is not needed to serve FPL's native load);
- Asset Management Agreement ("AMA") (FPL could outsource optimization function such as those described above to a third party through assignment of transportation and/or storage rights in exchange for a premium to be paid to FPL).

(ii) On an annual basis, FPL customers will receive 100% of the gain described in Paragraph 12(a)(i), up to a threshold of \$36 million ("Customer Savings Threshold"). In addition, FPL customers will receive 100% of the gain described in Paragraph 12(a)(i) for the first \$10 million above the Customer Savings Threshold ("Additional Customer Savings"). Incremental gains above the total of the Customer Savings Threshold and the Additional Customer Savings (i.e., above a gain of \$46 million) will be shared between FPL and customers as follows: FPL will retain 60% and customers will receive 40% of incremental gains between \$46 million and \$100 million; and FPL will retain 50% and customers will receive 50% of all incremental gains in excess of \$100 million. The customers' portion of all gains will be reflected as a reduction to fuel costs recovered through the Fuel Clause. FPL agrees that it will not require any native load customer to be interrupted in order to initiate or maintain an economy sale, whether that sale is firm or non-firm.

(b) FPL will be entitled to recover through the Fuel Clause the following types of reasonable and prudent incremental O&M costs incurred in implementing its expanded

short-term wholesale purchases and sales programs as well as the asset optimization measures (the "Incremental Optimization Costs"):

- (i) Incremental personnel, software and associated hardware costs incurred by FPL to manage the expanded short-term wholesale purchases and sales programs and the asset optimization measures; and
- (ii) variable power plant O&M costs<sup>3</sup> incurred by FPL to generate additional output in order to make wholesale sales, to the extent that the level of such sales exceed 514,000 MWh (*i.e.*, the level of sales assumed for the purpose of forecasting 2013 test year power plant O&M costs in the MFRs filed with the 2012 Rate Petition), with such costs determined by multiplying the sales above that threshold times the monthly weighted average variable power plant O&M cost per MWh reflected in the 2013 test year MFRs.

FPL's final true-up filing will separately state and describe the Incremental Optimization Costs that it incurred in the prior year, and such costs shall be subject to review and approval by the Commission.

- (c) On or after January 2, 2015 (*i.e.*, two years after the Implementation Date), the Commission may review and, if continuing the Incentive Mechanism is deemed not to be in the public interest, terminate the Incentive Mechanism for the remainder of the Term.
13. No Party to this Agreement will request, support, or seek to impose a change in the application of any provision hereof. Except as provided in Paragraph 9, a Party to this Agreement will neither seek nor support any reduction in FPL's base rates, including limited, interim or any other rate decreases, that would take effect prior to the first billing

<sup>3</sup> For the purpose of this Agreement, "variable power plant O&M costs" includes non-fuel O&M expenses and costs for capital replacement parts that vary as a function of a power plant's output.

cycle for January 2017, except for any such reduction requested by FPL or as otherwise provided for in this Agreement. FPL shall not seek interim, limited, or general base rate relief during the Term except as provided for in Paragraph 9 of this Agreement. FPL is not precluded from seeking interim, limited or general base rate relief that would be effective during or after the first billing cycle in January 2017, nor are the Parties precluded from opposing such relief. Such interim relief may be based on time periods before January 1, 2017, consistent with Section 366.071, Florida Statutes, and calculated without regard to the provisions of this Agreement.

14. Nothing in this Agreement will preclude FPL from filing and the Commission from approving any new or revised tariff provisions or rate schedules requested by FPL, provided that such tariff request does not increase any existing base rate component of a tariff or rate schedule during the Term unless the application of such new or revised tariff or rate schedule is optional to FPL's customers.
15. The provisions of this Agreement are contingent on approval of this Agreement in its entirety by the Commission without modification. The Parties further agree that they will support this Agreement and will not request or support any order, relief, outcome, or result in conflict with the terms of this Agreement in any administrative or judicial proceeding relating to, reviewing, or challenging the establishment, approval, adoption, or implementation of this Agreement or the subject matter hereof; provided, however, that nothing in this Agreement shall affect FIPUG's right to continue its appeal of Order No. PSC-12-0187-FOF-EI granting an affirmative determination of need for the Port

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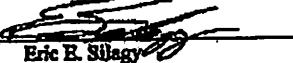
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Everglades Modernization Project or FPL's right to oppose that appeal. No party will assert in any proceeding before the Commission that this Agreement or any of the terms of this Agreement shall have any precedential value. Approval of this Agreement in its entirety will resolve all matters in Docket No. 120015-EI pursuant to and in accordance with Section 120.57(4), Florida Statutes. This docket will be closed effective on the date the Commission Order approving this Agreement is final, and no Party shall seek appellate review of any order issued in these Dockets.

16. This Agreement is dated as of August 15, 2012. It may be executed in counterpart originals, and a facsimile of an original signature shall be deemed an original. Any person or entity that executes a signature page to this Agreement shall become and be deemed a Party with the full range of rights and responsibilities provided hereunder, notwithstanding that such person or entity is not listed in the first recital above and executes the signature page subsequent to the date of this Agreement, it being expressly understood that the addition of any such additional Party(ies) shall not disturb or diminish the benefits of this Agreement to any current Party.

In Witness Whereof, the Parties evidence their acceptance and agreement with the provisions of this Agreement by their signature.

Florida Power & Light Company  
700 Universe Boulevard  
Juno Beach, FL 33408

By:   
Eric E. Silagy

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Notice of Filing Signature Page to  
Amended FPL Settlement Agreement

The Florida Industrial Power Users Group  
Jon C. Moyle, Jr., Esquire  
Vicki Gordon Kaufman, Esquire  
Moyle Law Firm  
The Perkins House  
118 North Gadsden Street  
Tallahassee, FL 32301

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**Jon C. Moyle, Jr.**

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DOCKET NO. 120015-EI  
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Attachment A  
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South Florida Hospital and Healthcare  
Association  
Kenneth L. Wissman, Esquire  
Andrews Kurth, LLP  
1350 K Street, N.W., Suite 1100  
Washington, D.C. 20004  
By:   
Kenneth L. Wissman

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Attachment A  
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Federal Executive Agency  
Lt Col Gregory J. File  
AFLCMC/JACL-ULPSC  
139 Barnes Drive, Suite 1  
Tyndall AFB, FL 32403

By: *[Signature]* 13 Dec 2012  
Lt Col (Ret)

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**Florida Power & Light Company  
Docket No. 140001-EI  
Staff's 2nd Set of Interrogatories  
Interrogatory No. 75  
Page 1 of 1**

**Q.**

**Please refer to page 6, paragraph 10, of the petition. For the five-year period 2009 to 2013, provide a table comparing the cost of production from Woodford shale gas reserves to market prices.**

**A.**

FPL was unable to obtain pricing for the Woodford shale for the year 2009. However, according to the global energy research and consulting firm Wood Mackenzie, the break-even price for producers in the Arkoma Basin of the Woodford Arkoma (which is the area of interest for the Woodford Project) is included in the following table:

	2010	2011 1H	2011 2H	2012 1H	2012 2H	2013 1H	2013 2H
Woodford Arkoma (Core)	\$ 4.75	\$ 4.96	\$ 4.40	\$ 4.11	\$ 3.87	\$ 4.04	\$ 3.89
NYMEX Henry Hub	\$ 4.39	\$ 4.21	\$ 3.87	\$ 2.48	\$ 3.10	\$ 3.71	\$ 3.59

Wood Mackenzie describes the break-even price as the Henry Hub equivalent price at which producers could sell their production while covering all operating costs and earning a 10% rate of return. The table illustrates the central point of Paragraph 10, which is that the cost of production is more stable than the NYMEX market prices. Those market prices were exceptionally low in the 2010-2013 period, but are not projected to remain that low into the future. Rather, they are expected to increase over time and consistently exceed the projected cost of production, which is the point of the last sentence in Paragraph 10 and is illustrated in Exhibit SF-7.