1	BEFORE THE				
2	FLORIDA PUBLIC SERVICE COMMISSION				
3	DOCKET NO. 090172-EI				
4	In the Matter of:		_		
5	PETITION TO DETERMI				
6	FLORIDA ENERGYSECUF BY FLORIDA POWER &				
7					
8		VOLUME 1			
9	. (Pages 1 through 220)			
10					
11	A CONVEN	VERSIONS OF THIS TRANSCRIPT ARE IENCE COPY ONLY AND ARE NOT			
12		AL TRANSCRIPT OF THE HEARING, ION INCLUDES PREFILED TESTIMONY.			
13					
14	PROCEEDINGS:	HEARING			
15	COMMISSIONER	CHAIRMAN MATTHEW M. CARTER, II			
16	PARTICIPATING:	COMMISSIONER LISA POLAK EDGAR COMMISSIONER KATRINA J. MCMURRIAN			
17		COMMISSIONER NANCY ARGENZIANO			
18	53.07	COMMISSIONER NATHAN A. SKOP			
19	DATE:	Monday, July 27, 2009			
20	TIME:	Commenced at 9:40 a.m.			
21	PLACE:	Betty Easley Conference Center Room 148	CATE H 8		
22		4075 Esplanade Way Tallahassee, Florida	еся-1 JUL 3 10N С		
23	REPORTED BY:	LINDA BOLES, RPR, CRR	DOCUMENT NUMBER-LATE 07848 JUL 318 FPSC-COMMISSION CLERK		
24		Official FPSC Reporter (850) 413-6734	781 7.00		
25			DOCU 0 FPSC		
	FLORIDA	A PUBLIC SERVICE COMMISSION			

1 PARTICIPATING: 2 JOHN T. BUTLER, ESQUIRE, and SCOTT GOORLAND, 3 ESQUIRE, Florida Power & Light Company, 700 Universe 4 Boulevard, Juno Beach, Florida 33408-0420, representing 5 Florida Power & Light Company. 6 GARY V. PERKO, ESQUIRE, and CAROLYN RAEPPLE, 7 ESQUIRE, Hopping Law Firm, Post Office Box 6526, 8 Tallahassee, Florida 32314, representing Florida Power & 9 Light Company. 10 FLOYD R. SELF, ESQUIRE, and ROBERT J. TELFER, 11 III, ESQUIRE, Messer, Caparello & Self, P.A., 2618 12 Centennial Place, Tallahassee, Florida 32308, 13 representing Florida Gas Transmission, LLC. 14 MARTHA CARTER BROWN, ESQUIRE, and ANNA 15 WILLIAMS, ESQUIRE, FPSC General Counsel's Office, 2540 16 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, 17 representing the Commission Staff. 18 MARY ANNE HELTON, DEPUTY GENERAL COUNSEL, FPSC 19 General Counsel's Office, 2540 Shumard Oak Boulevard, 20 Tallahassee, Florida 32399-0850, appearing as advisor to 21 the Commission. 22 23 24 25

1	INDEX	
2	OPENING STATEMENTS:	PAGE NO.
3	MR. BUTLER MR. SELF	12
4	WR. SELF WITNESSES	22
5	NAME -	DACE NO
6	NAME :	PAGE NO.
7	SAM FORREST	
8	Direct Examination by Mr. Butler	29 31
9	Prefiled Direct Testimony Inserted Prefiled Supplemental Direct Testimony Inserted	57
10	Errata Sheet for Prefiled Direct	64
11	Testimony Cross Examination by Mr. Self	72
12	Cross Examination by Ms. Brown Redirect Examination by Mr. Butler	90 123
13		
14	ROBERT SHARRA	
15	Direct Examination by Mr. Perko Prefiled Direct Testimony Inserted	133 136
16	Errata Sheet for Prefiled Direct Testimony	159
17	Cross Examination by Mr. Self Cross Examination by Ms. Brown	164 165
18	Cross Examination by MS. Brown	105
19	ROSEMARY MORLEY	
20	Direct Examination by Mr. Goorland Prefiled Direct Testimony Inserted	178 181
21	Errata Sheet for Prefiled Direct Testimony	209
22	Cross Examination by Ms. Brown	213
23		
24	CERTIFICATE OF REPORTER	220
25		
	FLORIDA PUBLIC SERVICE COMMISSIO	N

1	EXHIBITS		
2	NUMBER:	ID.	ADMTD.
3	1 Comprehensive Exhibit List	9	9
4	2 Staff's Non-confidential Composit Exhibit #2 stipulated	e 9	10
5 6	3 Staff's Confidential Composite Exhibit #3 stipulated	9	10
7	4 Parties' and Staff's Composite Exhibit #4 stipulated	9	10
8 9	5 SF-1	30	132
9 10	6 RGS-1	135	175
11	7 RGS-2	135	175
12	8 (Confidential) RGS-3	135	175
13	9 (Confidential) RGS-4	135	175
14	13 RM-1	179	
15	14 RM-2	179	
16	15 RM-3	179	
17	16 RM-4	179	
18	17 RM-5	179	
19	18 RM-6	179	
20	19 RM-7	179	
21	20 RM-8	179	
22	21 RM-9	179	
23	22 RM-10	179	
24	23 RM-11	179	
25	24 RM-12	179	

1		EXHIBITS		
2	NUMBER:		ID.	ADMTD.
3	25 RM-13		179	
4	26 RM-14		179	
5	27 RM-15		179	
6	28 RM-16		179	
7	29 RM-17		179	
8	30 RM-18		179	
9	31 RM-19		179	
10	32 RM-20		179	
11	33 RM-21		179	
12	95 (Confidential)	Interrogatory No	. 20 71	132
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
	FLORIE	DA PUBLIC SERVICE	COMMISSION	

	1
1	PROCEEDINGS
2	CHAIRMAN CARTER: With that, Commissioners, we
3	are staff, would you.please read the notice.
4	MS. WILLIAMS: By notice issued June 17th,
5	2009, this time and place has been set for an
6	administrative hearing in Docket No. 090172-EI, petition
7	to determine need for Florida EnergySecure Pipeline by
8	Florida Power & Light Company. The purpose of the
9	hearing is set out in the notice.
10	CHAIRMAN CARTER: Thank you. Let's take the
11	appearances of the parties.
12	MR. BUTLER: John Butler on behalf of Florida
13	Power & Light Company. Also appearing for Florida Power
14	& Light Company will be Gary Perko and Carolyn Raepple
15	of the Hopping, Green & Sams firm, and Scott Goorland of
16	FPL.
17	MR. SELF: Good morning, Commissioners. Floyd
18	Self and Robert J. Telfer of the Messer, Caparello &
19	Self Law Firm, appearing on behalf of Florida Gas
20	Transmission.
21	MS. BROWN: And Martha Carter Brown and Anna
22	Williams on behalf of the Commission staff. And, Mr.
23	Chairman, if I might introduce our legal intern, Jason
24	Arnold. He's been with us for the summer and has helped
25	on this case.

FLORIDA PUBLIC SERVICE COMMISSION

CHAIRMAN CARTER: Welcome, Jason. Welcome. 1 2 MS. HELTON: Mary Anne Helton, advisor to the 3 Commission. CHAIRMAN CARTER: Thank you. Staff, are there 4 5 any preliminary matters? 6 MS. BROWN: No, Commissioners, there really 7 are no preliminary matters. No witnesses have been 8 excused. I would point out that the notice of the hearing provides for public testimony. 9 There is one stipulated issue, Issue 12, which 10 the Commission could address after public testimony, if 11 12 there is any. CHAIRMAN CARTER: Okay. Let's see. Are there 13 any members of the public that came to testify today? 14 15 Any members of the public? Any public testimony? 16 Okay. Hearing none, Ms. Brown. MS. BROWN: All right. Mr. Chairman, Issue 17 12, which is on Page 13 of the Prehearing Order, is 18 stipulated. Staff recommends that the Commission 19 20 approve the stipulation as proposed. CHAIRMAN CARTER: Just outline it. Just kind 21 22 of run it down. MS. BROWN: Commissioner, yes. Issue 12 deals 23 24 with notice where the parties and FP&L have agreed to 25 provide notice of the costs of the proceeding and detail FLORIDA PUBLIC SERVICE COMMISSION

1 the final cost within 90 days of completion of the 2 project. CHAIRMAN CARTER: Mr. Butler, is that correct? 3 4 MR. BUTLER: That is correct, yes. CHAIRMAN CARTER: Mr. Self? 5 6 MR. SELF: Yes. 7 CHAIRMAN CARTER: Commissioners, any questions 8 or concerns? 9 Staff, your recommendation on --Staff recommends that the 10 MS. BROWN: 11 stipulation be approved. 12 CHAIRMAN CARTER: Commissioner Edgar? COMMISSIONER EDGAR: Mr. Chairman, I would 13 move that we adopt the proposed stipulation. 14 COMMISSIONER SKOP: Second. 15 CHAIRMAN CARTER: It's been moved and properly 16 17 seconded. Commissioners, any further questions, any 18 discussion, any debate? Hearing none, all in favor, let it be known by 19 20 the sign of aye. (Unanimous affirmative vote.) 21 All those opposed, like sign. Show it done. 22 23 Staff, you're recognized. MS. BROWN: Next, Mr. Chairman, we have the 24 Comprehensive Exhibit List that staff has passed out for 25

FLORIDA PUBLIC SERVICE COMMISSION

the Commissioners' convenience. It's in your books, the 1 first volume. We ask that you mark and move the exhibit 2 list itself into the record as Exhibit 1. And we --3 CHAIRMAN CARTER: One second. Hang on a 4 .. 5 second. 6 MS. BROWN: Okay. 7 CHAIRMAN CARTER: Any objection of the parties to moving the exhibit list in? 8 9 MR. SELF: No objections. 10 MR. BUTLER: No objection. CHAIRMAN CARTER: Show it done. 11 (Exhibit 1 marked for identification and 12 13 admitted into the record.) 14 You may proceed. MS. BROWN: We also ask that Staff's 15 16 Stipulated Nonconfidential Composite Exhibit be marked 17 as Exhibit 2, Staff's Stipulated Confidential Composite Exhibit be marked as Exhibit 3, and the parties' and 18 19 staff's Composite Deposition Exhibit be marked as 20 Exhibit 4. CHAIRMAN CARTER: That's marked for 21 22 identification. (Exhibits 2, 3, and 4 marked for 23 24 identification.) 25 MS. BROWN: We ask that those stipulated FLORIDA PUBLIC SERVICE COMMISSION

exhibits be moved into the record at this time. 1 2 CHAIRMAN CARTER: Is there any objection of 3 the parties? Mr. Butler? 4 MR. BUTLER: No objection. 5 CHAIRMAN CARTER: Mr. Self? 6 MR. SELF: No objection. 7 CHAIRMAN CARTER: Without objection, show it 8 done. 9 (Exhibits 1, 2, 3, and 4 admitted into the 10 record.) 11 You may proceed. 12 MS. BROWN: All other exhibits on the exhibit 13 list should be marked as indicated and moved into the record after each witness has testified. 14 15 CHAIRMAN CARTER: Okay. Any preliminary 16 matters before we proceed to opening statements? MR. BUTLER: Mr. Chairman? 17 18 CHAIRMAN CARTER: Mr. Butler, you're 19 recognized. MR. BUTLER: Very briefly. Just I would note 20 21 the -- FPL filed on Thursday of last week a notice of 22 amended position on Issues 14 and 15. It was after the 23 Prehearing Order had been issued, so the Prehearing Order doesn't reflect those changed positions. 24 25 Ms. Brown, do they have copies in their FLORIDA PUBLIC SERVICE COMMISSION

materials? We can certainly provide copies to the 1 2 Commissioners, if it's appropriate. But I just wanted to be sure that you were aware that we had filed that 3 change of position on Issues 14 and 15. 4 5 MS. BROWN: Why don't you pass out the position. I'm afraid that I dropped the ball on that. 6 7 CHAIRMAN CARTER: Okay. No problem. We'll 8 get it done. 9 Make sure you leave one for Commissioner 10 Argenziano as well. 11 Mr. Self, do you have this? 12 MR. SELF: Yes, sir. 13 CHAIRMAN CARTER: Okay. Mr. Butler, you may 14 proceed. 15 MR. BUTLER: Thank you. There are -- I don't 16 have any further preliminary matters. CHAIRMAN CARTER: Okay. So this will be added 17 on to our list of issues. Anything -- Mr. Self, any, 18 any preliminary matters before we proceed? 19 20 MR. SELF: The only thing, Mr. Chairman, which 21 I don't think is going to be an issue, is one of our 22 witnesses is flying in this morning. I doubt we'll get 23 to him this morning. But just in case, you know how weather and planes can be, in case he's delayed. 24 CHAIRMAN CARTER: Yes, I do. That will be 25 FLORIDA PUBLIC SERVICE COMMISSION

1	fine.
2	Okay. Staff or the parties, any other
3	preliminary matters before we proceed to opening
4	statements?
5	MS. BROWN: Not that I'm aware of, Mr.
6	Chairman.
7	CHAIRMAN CARTER: Hang on a second.
8	Mr. Butler is trying to get your attention there.
9	MS. BROWN: I don't think there are any
10	further preliminary matters.
11	CHAIRMAN CARTER: Okay.
12	MS. BROWN: And I guess we're ready for
13	opening statements, and the Prehearing Order states that
14	parties may have up to ten minutes a side for opening
15	statements.
16	CHAIRMAN CARTER: Okay. Let's proceed.
17	MR. BUTLER: Thank you. Good morning, Mr.
18	Chairman and Commissioners.
19	FPL is seeking an affirmative determination of
20	need for the Florida EnergySecure line, a 280-mile
21	intrastate natural gas pipeline that will initially
22	serve the needs of FPL's highly efficient modernized
23	combined cycle plants at Cape Canaveral and Riviera
24	Beach, and ultimately will serve FPL's growing gas
25	requirements for decades to come.

FLORIDA PUBLIC SERVICE COMMISSION

1 FPL decided to proceed with the EnergySecure 2 line only after a detailed analysis showed that it is the most economic alternative, yet the benefits go well 3 beyond economics. The EnergySecure line captures a 4 5 once-in-a-generation opportunity where there is 6 sufficient natural gas transportation requirements to 7 economically justify construction of a new 8 geographically separate pipeline in Florida.

9 Natural gas supplies are primarily delivered into Florida by two major interstate pipeline systems: 10 11 Florida Gas Transmission and Gulfstream Natural Gas. As 12 a third uniquely routed major pipeline in the state, the 13 EnergySecure line will increase the deliverability of 14 natural gas, enhance competition for both natural gas transportation and gas supply into Florida, provide FPL 15 16 with access to additional sources of natural gas, 17 improve the reliability of gas deliveries into Florida by reducing vulnerability to disruptions on the existing 18 19 pipeline systems, and provide significant investment and 20 economic activity in the numerous counties and the state 21 as a whole.

There is a clear and unavoidable need for the additional gas transportation capacity that the EnergySecure line will provide. FPL is an industry leader in demand-side management and is actively

FLORIDA PUBLIC SERVICE COMMISSION

cultivating and pursuing additional renewable 1 generation. These efforts by themselves, however, are 2 not enough. FPL must continue building large baseload 3 capacity additions, which will result in over 4 5 1.6 billion cubic feet per day of incremental natural gas needs by 2030, almost double FPL's current needs. 6 7 The existing natural gas transmission capacity 8 in Florida is inadequate to meet those incremental 9 needs. Moreover, continuing to increase FPL's reliance on Gulf area pipelines and gas supplies would not be in 10the best interest of FPL, its customers or the State of 11

Florida.

12

13 FPL conducted a solicitation that sought proposals from a wide range of major players in the gas 14 pipeline industry, excuse me, asking them to think 15 creatively about how best to meet FPL's gas 16 requirements. FPL specifically requested that all 17 participants include a proposal that would provide 18 access to natural gas supplies at Transco Station 85 19 with gas sourced out of the Midcontinent, giving access 20 21 to new and growing unconventional sources of supply.

FPL received and evaluated more than 60 proposals. As a result of its evaluation, FPL determined that the EnergySecure line, in conjunction with an interstate pipeline that would be built and

FLORIDA PUBLIC SERVICE COMMISSION

operated by what we have called Company E for confidentiality purposes, is the most cost-effective alternative available for transporting clean natural gas to meet FPL's planned needs and provide the greatest supply diversity and reliability.

1

2

3

4

5

23

24

25

The EnergySecure line and Company E pipeline 6 7 are sized to provide an initial capacity of 8 600 million cubic feet per day, which is the smallest 9 initial capacity that is cost-effective for a new 10 pipeline into Florida. The incremental cost of building 11 the EnergySecure line at an initial capacity of 600 million cubic feet per day instead of 400 12 million cubic feet per day is only \$15 million. 13

14 About two-thirds of this initial capacity will 15 be used by FPL's Cape Canaveral and Riviera Beach 16 plants, where the modernized facilities will reduce 17 emissions by utilizing natural gas instead of fuel oil. 18 The additional one-third of the initial capacity will also be utilized in FPL's system, as it will be FPL's 19 most cost-efficient pipeline capacity and likely will 20 21 displace contracted capacity on the FGT and/or 22 Gulfstream pipelines.

When FPL's needs exceed 600 million cubic feet per day initial capacity of the EnergySecure line, the line can be expanded at low cost by adding compression

FLORIDA PUBLIC SERVICE COMMISSION

up to an ultimate capacity of approximately 1.25 billion cubic feet per day.

1

2

23

24

25

FPL's economic analysis shows that the 3 combination of the EnergySecure line and Company E 4 pipeline is the most cost-effective way to meet FPL's 5 gas requirements under a wide range of scenarios. It is 6 important to recognize that all of those scenarios 7 include booking and recovering the full cost of the 8 EnergySecure line as electric plant-in-service from the 9 day the line goes into service in 2014. 10

However, FPL will offer the temporary excess 11 12 capacity on the EnergySecure line to other shippers in Florida, either directly via an electronic bulletin 13 board or by releasing some of FPL's capacity commitments 14 on existing pipelines. All revenues from these 15 16 short-term capacity sales will be returned to FPL's customers through the fuel clause, which will help 17 18 defray the cost of the EnergySecure line to customers, 19 making it even more cost-effective than we have modeled 20 for the purposes of this proceeding and thus substantially increasing the line's economic advantage 21 22 over the alternatives.

Of course, even if the economics were neutral, the other benefits of the EnergySecure line, supply diversity, reliability, et cetera, would still make it

FLORIDA PUBLIC SERVICE COMMISSION

the clear choice for meeting FPL's growing natural gas needs.

1

2

Recovery of the EnergySecure line costs 3 through electric base rates is appropriate. It's 4 5 consistent with the Uniform System of Accounts and it's essential to FPL's decision to move forward with this 6 project. FPL is building the EnergySecure line for one 7 8 purpose and one purpose only: To meet the gas 9 requirements of its electric power plants. As such, the EnergySecure line is no different than other supporting 10 11 equipment that is required to operate those plants, all 12 of which FPL recovers through electric rates.

13 The fact that the capacity of the line initially exceeds FPL's needs does not change that 14 15 conclusion. FPL and other investor-owned utilities 16 often build power plants whose capacity initially 17 exceeds their reliability requirements because it is ultimately more cost-effective to build a larger plant 18 19 than it would be to size the plant only for immediate 20 capacity requirements.

The initial excess capacity from such plants is also often marketed to wholesale purchasers in order to help bring down the cost of the utility's retail customers. FPL is doing the exact same thing with the EnergySecure line and should recover its costs in the

FLORIDA PUBLIC SERVICE COMMISSION

25

same manner.

2 The EnergySecure line will promote healthy 3 competition in a market that currently only has two 4 major pipelines, FGT and Gulfstream. This new pipeline will give FPL valuable negotiating leverage. In fact, 5 6 just the prospect of building the EnergySecure line has 7 already created a competitive dynamic. FGT has steadily reduced the price of its proposal once it became evident 8 9 that FPL was seriously considering building an interstate -- or intrastate pipeline as the most 10 11 cost-effective alternative. While FGT may assert that 12 its price adjustments were related solely to market 13 conditions, it is hard to believe that FGT would have 14 lowered its prices in the absence of competitive 15 pressures to do so. Now as a disappointed bidder, FGT has 16 17 criticized FPL's decision to proceed with the 18 EnergySecure line on several grounds, none of them 19 valid. I will briefly address FGT's principal 20 criticisms. FGT complains that FPL did not evaluate its 21 22 best proposal against the EnergySecure line. In fact, 23 FPL has evaluated FGT's latest updated proposal and 24 found the EnergySecure line to be more advantageous to

FLORIDA PUBLIC SERVICE COMMISSION

FGT

FPL's customers by between 115 and \$400 million.

also complained that it did not have the opportunity to use an existing FPL 18-inch pipeline connected -- to connect to the Riviera plant, as FPL intends to do for the EnergySecure line.

1

2

3

4

This is disingenuous, because FPL -- or FGT 5 6 has known of the 18-inch pipeline for years and could 7 have easily asked FPL for permission to use it. Nothing 8 in the solicitation process would have precluded FGT 9 from such an approach. In any event, FPL reanalyzed 10 FGT's proposal using the 18-inch pipeline and found that 11 the EnergySecure line is still the most economic and 12 best choice for FPL's customers.

13 FGT next suggests that FPL would be better off 14 accessing Midcontinent shale gas and other non-Gulf 15 sources by interconnecting with the Perryville Station 16 through the Southeast Supply Header, or SESH, rather 17 than at Station 85. FGT misses the point by trying to 18 make this an either/or choice. FPL recognizes value in 19 Perryville and already relies on it heavily by virtue of 20 its current SESH capacity.

However, the EnergySecure line's interconnection to Station 85 not only provides access to Station 85, but also provides additional access to Perryville through Company E's pipeline network. Furthermore, if FGT were to access onshore supplies via

FLORIDA PUBLIC SERVICE COMMISSION

Perryville rather than Station 85, as FPL requested, the economic advantage of the EnergySecure line would actually improve by more than \$100 million due to the cost of additional capacity that would be required on SESH.

1

2

3

4

5

6

7

8

9

24

25

In short, moving FGT's delivery point to Perryville would serve only to add costs to FGT's project and deprive FPL and its customers of important supply diversity.

FGT criticizes the gas forecasts that FPL used in its economic analyses, while offering no alternative of its own, excuse me, despite being directly asked by staff to do so. FPL uses a consistent methodology to forecast fuel prices and utilizes reputable well-established organizations for inputs.

16 FGT argues that FPL's long-term gas prices 17 should be higher because gas supplies could become 18 scarcer. However, given the significant technology 19 advances in horizontal drilling, the proliferation of 20 unconventional gas supplies throughout North America and 21 the number of LNG terminals being developed around the 22 country, there is ample reason to expect that gas 23 supplies will remain plentiful.

In any event, the results of FPL's economic analysis would not materially change due to differences

FLORIDA PUBLIC SERVICE COMMISSION

in gas prices. A 10 percent increase in natural gas prices would change the cost differential between the EnergySecure line and the FGT alternative by only about \$5 million. And here's the kicker. Using high gas prices, as FGT suggests, would actually increase the economic advantage of the EnergySecure line.

1

2

3

4

5

6

7 Finally, FGT argues that the load forecast used in FPL's economic analysis is too high, again 8 9 without offering a viable alternative. FPL's long-term 10 load forecast is reasonable and consistent with what FPL has used in other recent filings, including the 2009 11 Ten-Year Site Plan. It is based on the University of 12 Florida's population forecast, adjusted to take into 13 account UF's consistent trend of under forecasting. And 14 15 FPL's adjustment was very conservative, less than the five-year average of UF's under forecast. Even as 16 17 modestly adjusted, FPL's forecast remains within the band of UF's current long-term forecast. FGT is simply 18 19 wrong to suggest that FPL's load forecast is 20 unreasonable.

In conclusion, the EnergySecure line will provide reliable, diverse gas supply for Florida's power plants at the lowest overall cost to FPL customers. Nothing raised by FGT meaningfully calls that conclusion into question. The Commission should grant an

FLORIDA PUBLIC SERVICE COMMISSION

1	affirmative determination of need for the EnergySecure
2	line and determine that the project is properly booked
3	and treated as electric plant for all purposes under
4	Chapter 366.
5	Thank you.
6	CHAIRMAN CARTER: Thank you, Mr. Butler.
7	Mr. Self, you're recognized.
8	MR. SELF: Thank you, Mr. Chairman. Good
9	morning, Commissioners.
10	There's really only one thing you need to
11	remember about this case, and that is that FPL will not
12	build this 300-mile-long pipeline unless you agree to
13	put the entire \$1.6 billion cost into the electric rate
14	base. What this tells you is that notwithstanding
15	everything FPL may say about the demand projections and
16	the importance of this particular pipeline, this
17	pipeline is really not in the best interest of its
18	customers.
19	Approving this pipeline as proposed and
20	placing it in the electric rate base will impose
21	50 percent more cost on FPL's customers through at least
22	2020. Moreover, under FPL's preferred analysis, which
23	is seriously flawed, shows that the total end to end
24	pipeline does not become cost-effective until at least
25	2041, and you will hear how it may how it will never

FLORIDA PUBLIC SERVICE COMMISSION

1 be more cost-effective than the FPL proposal. 2 Let me just take a couple of minutes to kind 3 of outline some of the more serious consumer problems with this multi-billion-dollar proposal. 4 5 First, it's undisputed that the actual approved demand for natural gas transportation is 6 7 substantially less than what FPL wants to build. You will hear that FPL needs a total of only 8 400 million cubic feet of natural gas transportation to 9 10 serve the Cape Canaveral and Riviera Beach plants. However, FPL's pipeline is designed to deliver 1.25 11 12 billion cubic feet of gas, although initially it will only provide 600 million cubic feet, or about 50 percent 13 more than what's needed through at least 2020. То 14 justify this excess 200 million, FPL spins off several 15 options, none of which are viable or economic for 16 17 consumers.

FPL cannot sell excess capacity off its 18 19 pipeline because the pipeline is only going to be 20 connected to three FPL plants. FPL will tell you that it will release other gas transportation, but releasing 21 excess capacity does not help customers because the gas 22 being released is substantially cheaper than the cost 23 24 that FPL will incur to transport gas over its own 25 pipeline.

FLORIDA PUBLIC SERVICE COMMISSION

The other aspect of the demand analysis is the claim that this pipeline needs to be built now in order to serve FPL customers for the next 40 years. It's undisputed that Florida's population growth is flat and that FPL is actually a net customer loss situation today. Nevertheless, FPL has unilaterally adjusted its forecast upward beginning in 2012 to justify new gas-fired electric plants.

1

2

3

4

5

6

7

8

15

16

17

18

9 But even if FPL does experience the big bounce 10 up in population in 2012 as they're assuming, under 11 FPL's own forecasts FPL is still not going to need any 12 new gas generation plant or pipelines to serve such 13 plants until at least 2021. The bottom line is that FPL 14 is asking you to certify a need for the next 30 years.

Now you would not certify a need for a power plant that far out and make customers pay for it now, and you certainly should not certify and make customers pay for such transportation decades in advance either.

The second key issue in this case is whether this is the right pipeline to meet future demand. Since even FPL acknowledges that its pipeline is too big through at least 2020, FPL attempts to justify the \$1.6 billion price tag, which, by the way, the pipeline by itself cannot deliver one drop of gas, because they're telling you that they're going to connect this

FLORIDA PUBLIC SERVICE COMMISSION

2

3

4

5

6

pipeline to a new upstream interstate pipeline.

Now the problem is the only way Company E can build the interstate pipeline is by FPL agreeing to pay for 600 million cubic feet of capacity per day, which, as we've discussed, is already 50 percent more than what it actually needs.

7 Now in an attempt to make the whole deal more 8 attractive, FPL strings together a convoluted analysis of natural gas supplies to make you think you're getting 9 something that is otherwise not available from the 10 incumbent pipeline systems. Cutting through, cutting 11 through the clutter of Transco Station 85 versus 12 Citronelle, here's what you need to know. The 13 originating points of the Company E pipeline and the FGT 14 pipeline are less than 80 miles apart, and both have 15 access to the same diverse sources of natural gas 16 supply, including shale gas. 17

18 So fundamentally the real question is which 19 pipeline is more effective for customers? Again, by 20 FPL's own admission, FGT provided the lowest overall 21 cost alternative to supply the 400 million cubic feet 22 that is actually needed and which has been certified by 23 you, and which is all that's needed through at least 24 2020.

25

Now the third main issue in this case is the

FLORIDA PUBLIC SERVICE COMMISSION

rate base question and whether FPL's pipeline, if approved, would be subject to Chapter 368, which is the 3 pipeline regulatory statute.

1

2

4 To say that what FPL is asking for is 5 unprecedented does not begin to describe what FPL is б seeking from you. From all the evidence there is not a 7 single regulatory body in the United States that has 8 ever approved a 300-mile natural gas transportation 9 pipeline as a part of an electric utility's rate base. 10 You cannot and should not be the first. There is no 11 legal, regulatory, economic or public policy reason for 12 you to put a natural gas transportation pipeline in an 13 electric plant rate base.

14 In fact, these types of fuel transportation 15 systems have historically been in separate corporate affiliates, and there are a number of Florida electric 16 17 utilities which have supplied their fuel through 18 separate affiliate transportation entities. And with 19 the pipeline in a separate corporate entity if otherwise 20 approved, then it would clearly meet the definition of a 21 natural gas transportation company as set forth by the 22 Legislature in Chapter 368.

23 In the final analysis, this is not a 24 once-in-a-lifetime opportunity. During a time of 25 unprecedented growth in Florida, the gas transportation

FLORIDA PUBLIC SERVICE COMMISSION

needs of FPL's customers have been reasonably, reliably and economically met with incremental additions to the natural gas transportation systems. These large-scale redundant systems will continue to evolve and grow to meet the future transportation needs of Florida.

1

2

3

4

5

6 FPL has admitted that the new gas generation 7 plants can be built in three to five years and that new 8 gas transportation facilities can also be built in three to five years. So even if FPL's forecast proved true in 9 10 the coming decades -- and there's way too many ifs in those forecasts -- but even if FPL is right, there is an 11 opportunity each and every year for the decades to come 12 to reasonably and efficiently build natural gas 13 transportation to serve the power plants that may in the 14 future be authorized. 15

This Commission has never approved decades' worth of capacity years in advance on the basis of a utility's own economic analysis that takes 30 years to become cost-effective, and there's no reason to do so now.

You should not commit the consumers of Florida to an excessive, overbuilt, unnecessary \$1.6 billion pipeline, plus the secret costs of the additional interstate pipeline, especially when there is a significantly less costly alternative. More

FLORIDA PUBLIC SERVICE COMMISSION

	1
1	importantly, you should not add insult to injury by
2	rolling the \$1.6 billion cost into the electric rate
3	base. Make the best choice for consumers and reject the
4	certificate of need that FPL is seeking.
5	Thank you.
6	CHAIRMAN CARTER: Thank you, Mr. Self. Aside
7	from your witness who is flying in, are all of the other
8	witnesses in the, in the room?
9	Would you have all the witnesses stand,
10	please, so we can swear you in.
11	MR. BUTLER: Mr. Chairman, just I would note,
12	I don't think we have all of our witnesses here.
13	Certainly we can swear in the ones who are here, but I
14	don't believe all of them are
15	CHAIRMAN CARTER: Okay. Just remember, as we
16	get to those witnesses, if they have not been sworn in,
17	I'm going to hold the lawyers responsible for bringing
18	that to the, to the bench's attention.
19	(Witnesses collectively sworn.)
20	Thank you. You may be seated.
21	Call your first witness.
22	MR. BUTLER: Thank you, Mr. Chairman. FPL
23	would call Mr. Sam Forrest.
24	SAM FORREST
25	was called as a witness on behalf of Florida Power &
	FLORIDA PUBLIC SERVICE COMMISSION

1	Light Company and, having been duly sworn, testified as
2	follows:
3	DIRECT EXAMINATION
4	BY MR. BUTLER:
5	Q. Mr. Forrest, have you been sworn?
6	A. I have.
7	Q. Okay. Thank you. Would you please state your
8	name and address for the record?
9	A. Yes. Sam Forrest. Business address is
10	700 Universe Boulevard in Juno Beach, Florida, 33408.
11	Q. Thank you. Thank you. By whom are you
12	employed and in what capacity?
13	A. I am Vice President of the Energy Marketing
14	and Trading Business Unit of Florida Power & Light.
15	Q. Have you prepared and caused to be filed 26
16	pages of prefiled direct testimony with attached Exhibit
17	SF-1 and seven pages of prefiled supplemental testimony
18	in this proceeding?
19	A. I have.
20	Q. Did you also prepare and cause to be filed
21	errata to your testimony on July 24, 2009?
22	A. Yes.
23	Q. Okay. Do you have any further changes or
24	revisions to your prefiled direct or supplemental
25	testimony?
	FLORIDA PUBLIC SERVICE COMMISSION

1 Α. No, I do not. 2 Okay. With those changes, if I asked you the Q. 3 same questions contained in your direct and supplemental 4 testimony, would your answers be the same today? 5 Yes, they would. Α. 6 MR. BUTLER: Okay. Mr. Chairman, I'd ask that 7 Mr. Forrest's direct and supplemental testimony be 8 inserted into the record as though read. 9 CHAIRMAN CARTER: The prefiled testimony of 10 the witness will be inserted into the record as though 11 read. MR. BUTLER: I would also note that 12 Mr. Forrest's Exhibit SF-1 has been identified as 13 14 Exhibit 5 on Staff's Comprehensive Exhibit list. 15 CHAIRMAN CARTER: For the record for identification, Exhibit Number 5. 16 17 (Exhibit 5 marked for identification.) 18 19 20 21 22 23 24 25

•

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF SAM FORREST
4		DOCKET NO. 09EI
5		
6	Q.	Please state your name and business address.
7	А.	My name is Sam Forrest. My business address is Florida Power & Light
8		Company, 700 Universe Boulevard, Juno Beach, Florida 33408.
9	Q.	By whom are you employed and what is your position?
10	A.	I am employed by Florida Power & Light Company ("FPL" or the
11		"Company") as Vice President of the Energy Marketing & Trading (EMT)
12		Business Unit.
13	Q.	Please describe your duties and responsibilities in that position.
14	А.	I am responsible for the overall direction and management of the EMT
15		Business Unit, which handles FPL's short-term and long-term fuel
16		management and operations. These fuels include natural gas, residual and
17		distillate fuel oils and coal. Additionally, EMT is responsible for FPL's fuel
18		hedging program, long-term fuel transportation and storage contracts, power
19		origination activities and short-term power trading and operations. EMT is an
20		active participant in the daily spot natural gas supply market throughout the
21		southeastern United States

1Q.Please describe your educational background and professional2experience.

3 Α. I hold a Bachelor of Science in Electrical Engineering from Texas A&M 4 University and a Masters of Business Administration from the University of 5 Houston. Prior to being named Vice President of EMT for FPL in June 2007, 6 I was employed by Constellation Energy Commodities Group (CECG) as 7 Vice President, Origination. In this capacity, I was responsible for managing 8 a team of power originators marketing structured electric power products in 9 Texas, the Western United States and Canada. Prior to my responsibilities 10 with CECG in the West, I was responsible for CECG business development 11 activities in the Southeast U.S.

12

Before joining CECG, from 2001 to 2004, I held a variety of energy marketing and trading management positions at Duke Energy North America (DENA). Prior to DENA, I was employed by Entergy Power Marketing Corporation (EPMC) in several positions of increasing responsibility, including Vice President - Power Marketing, following EPMC's entry into a joint venture with Koch Energy Trading.

19

From 1996 to 1998, I was Director of Installations at Dealer Solutions, a successful start-up organization in the automotive industry. My staff was responsible for installing a customized software application across the U.S.

 ${}^{*} = {}^{*}$

1		From 1987 to 1996, I worked for AlliedSignal Aerospace at the Johnson
2		Space Center in Houston, Texas in increasing roles of responsibility. My last
3		role there was as Branch Leader of engineers responsible for implementing
4		change requests to NASA ground support equipment, including the Mission
5		Control Center and Software Production Facility.
6	Q.	Are you sponsoring any exhibits in this case?
7	A.	Yes. I am sponsoring the following exhibit which is attached to my
8		testimony:
9		• SF-1 Florida EnergySecure Line Fact Sheet and Map
10	Q.	What is the purpose of your testimony in this proceeding?
11	A.	FPL is seeking an affirmative determination of need to develop, construct and
12		operate the Florida EnergySecure Line (or the "Project"), a new Florida
13		intrastate natural gas pipeline, which will serve the needs of FPL's Cape
14		Canaveral Next Generation Clean Energy Center and Riviera Beach Next
15		Generation Clean Energy Center (respectively, CCEC and RBEC;
16		collectively, the "Modernization Projects"), as well as other current and future
17		gas transportation needs of FPL and the state of Florida. Generally, my
18		testimony provides: (1) an overview of FPL's request; (2) a description of the
19		benefits the Florida EnergySecure Line will provide for FPL's customers and
20		the state; and (3) the adverse consequences of delaying or denying approval of
21		the Project. I also address these key considerations concerning the Project: (1)
22		the importance of the Florida EnergySecure Line in supplying natural gas
23		transportation to FPL's CCEC and RBEC facilities; (2) the need to provide for

1		incre	ased reliability of the natural gas infrastructure in Florida; (3) the need to
2		conti	nue to diversify sources of gas supply to Florida; and (4) the potential to
3		expar	nd this new resource to meet future natural gas needs of the state.
4	Q.	Pleas	e provide an overview of the testimony filed on FPL's behalf.
5	A.	The 1	testimony submitted on behalf of FPL in this proceeding is offered to
6		expla	in and support:
7		1)	The need for incremental natural gas transportation capacity in Florida,
8			specifically in FPL's service territory;
9		2)	The benefits of the Florida EnergySecure Line, including its role in
10			improving the deliverability and reliability of natural gas transmission
11			in Florida;
12		3)	The Project's access to adequate and diverse natural gas supplies and
13			upstream natural gas transmission pipeline capacity;
14		4)	The safety and integrity FPL will employ in constructing and operating
15			the Florida EnergySecure Line;
16		5)	The Project's capability to accommodate FPL's projected load growth;
17		6)	The Florida EnergySecure Line's favorable economics for natural gas
18			transmission within Florida; and
19		7)	The unique opportunity Florida has at this time to expand the existing
20			pipeline infrastructure into and within Florida, which may not present
21			itself again for some time.

1 Q. Please identify FPL's witnesses in this proceeding and the areas they 2 cover. 3 Α. The following is a listing of FPL's witnesses and the areas they cover (note: 4 listed in anticipated order of appearance): 5 Robert G. Sharra, Director, Project Development, FPL - FPL's current 6 firm natural gas transportation commitments; detailed description of 7 the Florida EnergySecure Line and its upstream sources of supply; 8 Clinton M. Collins, Director, FPL Group, US Gas Assets -9 Operational and construction details of the Florida EnergySecure Line; 10 pipeline safety and integrity; and projected cost of the Project; 11 Heather C. Stubblefield, Manager, Project Development, FPL - FPL's 12 solicitation process and evaluation of proposals; and inputs to the 13 economic analysis of the Florida EnergySecure Line and alternatives; 14 Dr. Rosemary Morley, Director, Load Forecasting and Analysis, FPL 15 - FPL's load forecast; 16 Juan E. Enjamio, Supervisor - Integrated Analysis, Resource Analysis 17 and Planning, FPL - Need for additional natural gas transmission 18 capacity for FPL under FPL's long term resource plan and two alternate resource plans including the addition of reasonably 19 20 anticipated levels of renewable resources and demand side 21 management (DSM); evaluation of the total cost to FPL's customers of 22 the Florida EnergySecure Line and alternatives for meeting the need 23 for additional natural gas transmission capacity; and projecting the

- approximate bill impact of the Florida EnergySecure Line to FPL's
 customers;
 - Timothy C. Sexton Vice President, Gas Supply Consulting, Inc –
 Overview of existing natural gas infrastructure in Florida; need for
 additional natural gas transportation capacity in Florida; description of
 upstream natural gas supplies and capacity; third-party review of
 FPL's solicitation analysis; improvement of reliability and economics
 of natural gas transportation in Florida resulting from the Florida
 EnergySecure Line.
- 10
- 11

SUMMARY OF FPL'S REQUEST

12

13 Q. Please summarize FPL's need determination request in this proceeding.

14 Α. On September 12, 2008, the Florida Public Service Commission ("FPSC" or 15 "Commission") approved the need for modernizations at FPL's Cape Canaveral and Riviera Plants. The Modernization Projects will result in new 16 17 natural gas combined cycle facilities that require approximately 400 million 18 cubic feet of natural gas per day (MMcf/d). FPL does not currently have 19 enough firm gas transportation capacity under contract to meet this increased 20 need for natural gas in addition to its already substantial gas transportation 21 requirements. Accordingly, FPL sought proposals from a wide range of firms 22 in the natural gas transportation industry to meet this increased need. FPL 23 evaluated these proposals and compared them to a potential project in which

1

2

FPL would build and operate an intrastate pipeline to transport natural gas to FPL's generating units and to other delivery points within Florida.

3

FPL has determined that this self-build alternative, the Florida EnergySecure Line, is the most strategic and cost-effective solution available to meet the natural gas demands of the Modernization Projects, as well as having the overall effect of strengthening Florida's natural gas infrastructure and positioning it to meet future natural gas transportation needs. Consequently, FPL seeks from the Commission an affirmative determination of need for the Florida EnergySecure Line.

11

Furthermore, it is important to understand there is no viable "do nothing" alternative in this case. The need for additional gas at the CCEC and RBEC facilities, or any future natural gas-fired generating units, dictates significant pipeline infrastructure must be added, whether it is through new infrastructure such as the Florida EnergySecure Line or a substantial upgrade of existing pipelines.

18 Q. Please describe FPL's energy resource needs as they relate to the need for
 19 the Florida EnergySecure Line.

A. As discussed by FPL witness Enjamio, from 2013 through 2040 FPL will
 need 17,357 MW of incremental gas-fired capacity, including 1,610 MW to
 replace expiring purchase power agreements (PPA), to continue to meet its
 reliability criteria. At the same time, FPL continues to advance energy

1 efficiency and load management techniques through industry-leading conservation efforts and other DSM programs, and actively cultivates and 2 pursues the development of additional renewable generating capacity within 3 For example, FPL estimates that it can offset approximately 4 Florida. 5 1,121 MW of resource needs through energy efficiency and DSM gains between 2009 and 2018. Regarding renewable resources, FPL has already 6 received approval by the Commission to develop 110 MW of solar projects at 7 FPL's DeSoto, Space Center and Martin sites. Those projects are taken into 8 9 account in all of the scenarios under which FPL evaluated its resource needs. Beyond those projects, FPL cannot predict the precise outcome of the 10 11 Renewable Portfolio Standard (RPS) proposals being discussed in Florida or in the U.S. Congress. But we do expect to see some form of RPS in place 12 over the near to midterm planning horizon. Accordingly, one of the scenarios 13 under which FPL has evaluated the need for additional generating resources 14 15 assumes the addition of 3,290 MW of incremental renewable resources from 16 2010 through 2040.

17

18 These efforts by themselves, however, are not enough to meet FPL's resource 19 commitments. As a result, FPL must also construct large, baseload natural 20 gas-fueled generation additions if the Company is to continue providing 21 reliable service at reasonable prices. A key component of that resource mix is 22 the Modernization Projects which, by themselves, will require approximately 23 400 MMcf/d.

Please provide an overview description of the Florida EnergySecure Line. 1 Q. The Florida EnergySecure Line is an approximately 300-mile natural gas 2 A. pipeline connecting at a receipt point near Florida Gas Transmission, LLC's 3 (FGT) Compressor Station 16 (FGT Station 16), located near Starke, Florida 4 in Bradford County, to a termination point at FPL's Martin Plant located near 5 Indiantown in Martin County. There are additional delivery points at FPL's 6 modernized CCEC and RBEC facilities. The 30-inch diameter Florida 7 EnergySecure Line will have an initial capacity of 600 MMcf/d, with a 8 delivery capability of 200 MMcf/d to the CCEC and 200 MMcf/d to the 9 RBEC. The remaining 200 MMcf/d will be delivered to FPL's Martin Plant 10 for reliability purposes, but will also be offered to other entities within 11 The 200 MMcf/d delivered to the Martin Plant can displace 12 Florida. deliveries from FGT or Gulfstream to that site, which can then be redirected to 13 other FPL facilities or to other entities within the state. As discussed in FPL 14 witness Sharra's testimony, FPL is currently seeking public and regulatory 15 input on the proposed corridor which is subject to change based on public 16 17 input and the Natural Gas Transmission Pipeline Siting Act (NGPSA) 18 application review process. A Fact Sheet and Map of the Florida 19 EnergySecure Line containing additional information on the Project are 20 attached to my testimony as Exhibit SF-1.

1	Q.	What is the relationship between the timing of the Modernization
2		Projects and the Florida EnergySecure Line?
3	A.	The CCEC and RBEC are currently expected to be in service by June 2013
4		and June 2014, respectively. The Florida EnergySecure Line is currently
5		scheduled to be in operation in January 2014.
6		
7		While not a permanent solution, FPL has developed appropriate plans that will
8		allow the gas needs of the CCEC to be met utilizing existing delivery rights
9		during the interim period until the Florida EnergySecure Line is operational.
10		Those plans are covered in more detail by FPL witness Sharra.
11	Q.	Please describe the importance of proceeding expeditiously with the
12		permitting process for the Florida EnergySecure Line.
13	A.	The permitting of a Florida-based intrastate pipeline is a relatively new
14		process within Florida, as siting a pipeline under the NGPSA has only been
15		attempted once previously. There is the potential for possible unforeseen
16		issues. Therefore, it is important to start the permitting process now in order
17		to build in adequate buffers in the schedule for contingencies. Initiating the
18		permitting process now will best position the Company to meet the gas
19		requirements of the Modernization Projects, regardless of the ultimate in-
20		service dates for these projects.
21	Q.	Where will the Florida EnergySecure Line obtain its upstream supply?
22	А.	As discussed by FPL witness Stubblefield, FPL has executed a Letter of Intent
23		(LOI) with a third party natural gas transmission company (referred to as

"Company E" for confidentiality purposes) to negotiate a Precedent 1 Agreement based upon the proposal submitted by Company E in response to 2 FPL's Solicitation Letter. The LOI expresses FPL's and Company E's intent 3 to negotiate a Precedent Agreement on or before October 1, 2009 that would 4 provide for 600 MMcf/d of gas transportation from Transcontinental Gas Pipe 5 Line Company's (Transco) Station 85 to be delivered to the Florida 6 7 EnergySecure Line at FGT Station 16, beginning on January 1, 2014. The agreement will provide for the necessary access to natural gas supply and 8 9 delivery rights required to deliver natural gas into the Florida EnergySecure Line. The agreement will be similar to FPL's current firm transportation 10 agreements with FGT and Gulfstream. I will refer to the Company E pipeline 11 that will supply the Florida EnergySecure Line as the "Upstream Pipeline." 12

Q. Can the capacity of the Upstream Pipeline and the Florida EnergySecure Line be expanded economically to accommodate future growth in gas requirements?

A. Yes. As FPL's load growth increases and creates the need for additional
generation on its system, the Florida EnergySecure Line will be capable of
expanding to as much as 1.25 billion cubic feet per day (Bcf/d). These future
expansions will come at a greatly reduced price to our customers as there will
be minimal infrastructure required to add the additional capacity. FPL will
likewise have access to additional capacity on the Upstream Pipeline to supply
the Florida EnergySecure Line's expanded capacity.

Q. Is FPL qualified to construct and operate the Florida EnergySecure
 Line?

Yes. As discussed by FPL witness Collins, FPL has built a number of 3 Α. transmission and piping systems with much more complex operating and 4 engineering conditions than the proposed Project. FPL has demonstrated in 5 previous projects its ability to engineer and construct numerous electric 6 transmission corridors and generating plants throughout Florida. In many 7 respects, a gas pipeline construction project is very similar to a transmission 8 line construction project which involves similar land and permitting issues, as 9 well as many of the same construction techniques. FPL brings established 10 11 project management skills, a highly-qualified staff, and the necessary ancillary 12 support services, procedures and staff to undertake projects of this magnitude. 13 FPL is also making use of key personnel within affiliate companies that have 14 years of experience in the design, construction and operation of pipelines 15 throughout North America.

Q. Please summarize why the Commission should grant an affirmative
 determination of need for the Florida EnergySecure Line.

A. As explained in the testimonies of FPL witnesses Sharra and Sexton, natural
gas is currently delivered to FPL from the U.S. Gulf Coast on-shore and offshore regions via two interstate pipelines: FGT and Gulfstream Natural Gas
System, L.L.C. (Gulfstream). There are two other pipelines that deliver gas to
Florida (Gulf South Pipeline Company, LP and Southern Natural Gas
Company's (SNG) Cypress Pipeline), but as discussed in FPL witness

Sexton's testimony, those pipelines do not provide for the gas supply dynamics required by FPL.

3

2

While FGT and Gulfstream have provided reliable service to FPL over the 4 years, the demands on both pipelines from FPL and other users have 5 6 continued to grow. In fact, FGT's existing firm capacity is fully subscribed and a significant percentage of the firm capacity on its recently-announced 7 820 MMcf/d Phase VIII expansion has been subscribed as well. By mid-8 2009, Gulfstream's firm capacity likewise will be fully subscribed. Added 9 together, FPL's modernized CCEC and RBEC facilities, each with a firm 10 11 capacity demand of 200 MMcf/d, necessitate an expansion of the gas transportation infrastructure in Florida. Neither FGT's nor Gulfstream's 12 13 existing pipelines nor currently planned upgrades to their pipelines can meet the firm gas requirements of FPL's Modernization Projects. 14

15

It is important to understand there is no viable "do nothing" alternative in this 16 17 case. The need for additional gas at CCEC and RBEC, or any future natural gas-fired generating units, dictates significant pipeline infrastructure must be 18 19 added, whether it is through new infrastructure such as the Florida 20 EnergySecure Line or a substantial upgrade of existing pipelines. Once either 21 path is taken, FPL expects that it will be a long time before future gas 22 requirements will again require comparably substantial new gas transportation 23 infrastructure. Thus, if the Commission does not grant the need for the

1

2

Florida EnergySecure Line, the opportunity to capture the benefits described in FPL's testimony will be lost for many years to come.

3 Q. How did FPL determine the Florida EnergySecure Line was the best 4 alternative to meet its projected load growth?

5 Α. As described in FPL witness Enjamio's testimony, even with conservation, 6 renewables and nuclear expansion, FPL will continue to rely on natural gas-7 fueled generation for the foreseeable future to meet customer demand. 8 Therefore, it is imperative that FPL consider alternatives to maintain 9 reliability of the gas supply. Consequently, FPL analyzed the various 10 alternatives available for incremental firm capacity through a comprehensive 11 solicitation process. Ultimately, this solicitation process (described by FPL 12 witness Stubblefield) and an economic analysis of the resulting alternatives (described by FPL witness Enjamio) led FPL to conclude that the Florida 13 EnergySecure Line in combination with the Upstream Pipeline offered FPL 14 and its customers the most strategic and cost-effective solution to meet the gas 15 16 supply needs now and into the future.

17 Q. What scenarios did FPL look at to analyze the different proposals
18 submitted in response to their solicitation?

19 A. In addition to FPL's long-term resource plan described by FPL witness
20 Enjamio, two alternate scenarios were developed to analyze firm gas
21 transportation alternatives. These alternate scenarios are the Renewable
22 Portfolio Standard (RPS) Scenario resource plan (RPS Scenario) and the
23 Nuclear Delay Scenario resource plan (Nuclear Delay Scenario). The RPS

1 Scenario assumes that the state will adopt an RPS rule with a target of 20% 2 renewable energy by 2020, constrained by a 2% cap on increased retail 3 revenues. In addition, because of the licensing and construction uncertainties 4 surrounding new nuclear construction, FPL developed the Nuclear Delay 5 Scenario that assumes a four year delay in the construction of the Turkey 6 Point Units 6 and 7 until 2022 and 2024, respectively.

Q. Will FPL reduce its current capacity on the FGT or Gulfstream
transportation systems if the Florida EnergySecure Line is approved?

9 A. No. FPL has numerous long-term firm transportation agreements with both
FGT and Gulfstream to meet gas requirements for other existing FPL facilities
that are not impacted by a decision to proceed with the Florida EnergySecure
Line. In fact, FGT and Gulfstream currently provide gas supplies to FPL and
other generation facilities throughout the state and will continue to do so for
many years to come.

Q. Is it possible to meet the needs of 400 MMcf/d for FPL's CCEC and
RBEC with the FGT and/or Gulfstream pipelines as they are currently
configured?

A. No. FPL's current facilities at Cape Canaveral and Riviera Beach have low
gas-pressure requirements due to the nature of the technology used on these
older conventional steam units. The plants are currently connected to FGT
and are served contractually at low pressure (less than 100 pounds per square
inch). The new modernized CCEC and RBEC units, however, will require a
much higher inlet pressure that cannot be served with the existing pipeline

infrastructure. Additionally, the need for 400 MMcf/d must be met with
 increased supply beyond what FPL has currently contracted. The combination
 of the need for both a delivery system with a higher pressure capability and
 increased capacity dictates new infrastructure.

5 Q. How does FPL plan to use the 200 MMcf/d of initial capacity on the 6 Florida EnergySecure Line beyond the 400 MMcf/d required for the 7 CCEC and RBEC Modernizations?

8 The remaining 200 MMcf/d will be delivered to the Martin Plant, where it will Α. 9 displace deliveries from FGT or Gulfstream that can then be redirected to 10 other FPL facilities or to other entities within the state. FPL will market the 200 MMcf/d to other entities within the state to help meet their needs and to 11 further increase the reliability of the fuel infrastructure on a statewide basis. 12 13 Revenues received from any such sales would flow back to the benefit of 14 FPL's retail customers via the Fuel Cost Recovery Clause and would offset a 15 portion of the costs associated with the pipeline.

16

Eventually, FPL expects that its own gas requirements will utilize the full capacity of the pipeline and likely warrant expansion of that capacity over time, which can be done inexpensively when compared to other alternatives.

	BENEFITS OF THE FLORIDA ENERGYSECURE LINE
Q.	What benefits will result from the Florida EnergySecure Line being
	built?
А.	Construction of the Florida EnergySecure Line will provide the following
	benefits for FPL's customers and the state of Florida:
	• Increased reliability of natural gas transmission within Florida;
	• Increased deliverability of natural gas within Florida with the addition
	of 600 MMcf/d of new gas supply;
	• Enhanced reliability and options in the event of any interruption on
	either of the existing Gulfstream or FGT pipelines;
	• Additional diversification of the gas supplies available to Florida;
	• Provision of the most cost-effective solution to meet the needs of the
	modernizations, as well as other natural gas delivery needs of the state;
	• Creation of efficiencies of pipeline to pipeline and gas to gas
	competition; and
	• The Florida EnergySecure Line will provide growth in state and local
	economies, new construction jobs, as well as substantial local
	purchases of materials and supplies.
	-

Q. Please describe how the Florida EnergySecure Line will improve the
 reliability, deliverability and integrity of natural gas transmission within
 the state of Florida.

4 Α. FPL, as well as the rest of Florida, is already heavily dependent on both the 5 FGT and Gulfstream systems. With the estimated 2011 completion of FGT's 6 Phase VIII project, FPL will have 1.274 Bcf/d of firm gas transportation on 7 that pipeline, which represents approximately 66% of FPL's peak gas supply. 8 Similarly, by the end of 2009, Gulfstream will supply 695 MMcf/d of FPL's 9 gas load, representing 33% of FPL's peak gas supply. Together, this is almost 10 2 Bcf/d, which on a peak day at maximum flow serves approximately three 11 million FPL customers, all relying on two interstate pipelines whose available 12 natural gas transportation capacity is almost fully subscribed.

13

14 Currently, approximately 53% of all energy generated on FPL's system is 15 produced using natural gas. This is expected to increase to 63% by 2011 and 16 would continue to grow as additional gas-fired generation is added to meet the 17 resource needs of the state, in conjunction with wind, nuclear and solar 18 projects aggressively being pursued to meet the power supply needs within 19 FPL's service territory. FPL's dependence on natural gas could grow to as 20 high as 69% in 2018 under the nuclear delay scenario described earlier. 21 Additionally, FPL is among the largest users of natural gas in the United 22 States. In 2007, FPL burned 450 Bcf of natural gas, which ranks number one 23 in the country among users of natural gas to generate electricity according to

the Department of Energy's (DOE) Energy Information Administration (EIA).

2

3

4

5

6

7

8

9

10

11

1

By facilitating the introduction of a third major interstate pipeline into Florida and offering a uniquely routed pipeline that has the potential to be connected at multiple points with the existing infrastructure of the state, the Florida EnergySecure Line will increase the reliability of the natural gas infrastructure of Florida and reduce Florida's overall capacity concentration on the FGT and Gulfstream pipelines. The resulting integrated pipeline system will enhance reliability of pipeline operations and provide additional options in the event of any interruption on either of the existing Gulfstream or FGT pipelines, as well as make gas available when and where it is needed within the state.

12

13 As described by FPL witness Sharra, the interconnection of the Florida 14 EnergySecure Line with the Upstream Pipeline and FGT in the northern part 15 of the state, and the opportunity to interconnect with FGT and Gulfstream at 16 the Martin Plant in the southern part of the state, will provide significant 17 operational flexibility. As planned and unplanned outages occur on any of the 18 pipelines, the ability to receive gas through existing delivery rights within the 19 state will ensure reliable delivery of service. Additionally, as greater than 20 50% of FPL's gas supply comes from the Gulf of Mexico, having a unique 21 physical pipeline route receiving gas from on-shore sources will reduce the 22 dependence on the Gulf of Mexico and will provide further protection against 23 weather-related supply disruptions to which the Gulf supply is extremely

susceptible.

1

2 Q. Please describe how the Florida EnergySecure Line will improve the
3 diversity of supply of natural gas coming into the state.

4 A. As explained by FPL witness Sexton, fuel reliability and operational flexibility 5 would be enhanced by the Florida EnergySecure Line through diversification of 6 FPL's sources of natural gas supply. The proposed pipeline into Florida would be largely supplied from unconventional shale gas production 7 discoveries in Texas, Arkansas, Oklahoma and Louisiana. The addition of the 8 9 Upstream Pipeline as a major supply source into Florida will give FPL, as 10 well as other natural gas users in Florida, access to unconventional shale gas 11 in the Mid-Continent, liquefied natural gas (LNG), and traditional Gulf Coast 12 supply through a large existing pipeline infrastructure. The Upstream Pipeline also provides access to newly developing and existing LNG regasification 13 Having access to several supply basins, which the Upstream 14 facilities. Pipeline offers, protects against declining production in a given supply basin. 15

16 Q. Please explain how the Florida EnergySecure Line will improve the
17 economics of gas delivery within the state.

A. As demonstrated in the testimony of FPL witnesses Enjamio and Sexton, the
Florida EnergySecure Line is the most cost-effective, economically beneficial
solution to meet FPL's future gas requirements for FPL's customers, even
before taking into account the potential for offsetting revenues from sales of
capacity to third parties and its other reliability and diversity benefits. Using
the conventional measure of the cumulative net present value of revenue

1 requirements (CPVRR), FPL witness Enjamio projects that the Florida 2 EnergySecure Line will reduce costs for FPL's customers by between \$204 3 million and \$513 million, compared to the next-best gas transportation 4 alternative. This range of values was independently corroborated by FPL 5 witness Sexton using a different valuation methodology than the CPVRR 6 method. Thus, the Project has lower long term life-cycle costs as compared to 7 multiple smaller expansions of the existing pipeline infrastructure every two 8 to three years as new generation is added.

9 Q. Are there other economic benefits associated with the Florida 10 EnergySecure Line?

Yes. As has been mentioned previously in my testimony, there will be an 11 Α. opportunity to market the initial 200 MMcf/d of excess transportation to other 12 entities within the state. FPL witness Sexton will describe different scenarios 13 for capturing value through this marketing effort, showing a potential range of 14 \$220 million to \$660 million of additional value. This range of values would 15 be in addition to the overall economics described by FPL witness Enjamio and 16 would be returned to FPL's retail customers through the Fuel Cost Recovery 17 While it is not possible to predict the extent of any such 18 Clause. opportunities, it is important to emphasize that this range of possible benefits 19 would be in addition to the Florida EnergySecure Line's overall economic 20 benefit to customers that is described by FPL witness Enjamio. 21

Additionally, with FPL in an ownership position, the Florida EnergySecure Line will allow for greater influence over the timing, location and cost of future expansions, thus providing for significant long term customer benefits. Future expansions of the Florida EnergySecure Line up to 1.25 Bcf/d are extremely cost effective and will be among the least expensive transportation contracts in FPL's supply portfolio.

1

2

3

4

5

6

7

- 8 Finally, as described in FPL witness Sharra's testimony, projects such as the 9 Florida EnergySecure Line and the Southeast Supply Header (SESH) can 10 create market dynamics that have a significant positive impact on the While other alternatives FPL has 11 economics of the overall portfolio. considered also offer the diversity that comes from accessing supplies at 12 Transco Station 85, the Florida EnergySecure Line also is unique among the 13 alternatives in establishing a new natural gas receipt point in northern Florida 14 through a potential interconnection with FGT Station 16. 15
- 16 Q. Please describe other benefits that the Florida EnergySecure Line will bring
 17 to the state of Florida.

A. Construction and operation of the Florida EnergySecure Line will provide a
much-needed boost to state and local economies in the form of new
construction jobs and substantial local purchases of materials and supplies. At
a time when Floridians are feeling the effects of the current economic
slowdown, this Project will have significant positive impacts. As discussed in
FPL witness Sharra's testimony, there will be over 3,500 direct construction

jobs created in Florida from the Florida EnergySecure Line and the state and local economic impact of construction and non-construction could reach \$1.2 billion. Additionally, this Project will generate over \$400 million in life-cycle tax benefits to local governments, while generating approximately \$20 million in Florida Sales and Use tax revenues.

- 7 Florida will also benefit from the environmental benefits that the Florida 8 EnergySecure Line will facilitate. The gas that it supplies to the CCEC and 9 RBEC will allow them both to displace the burning of fuel oil and to burn 10 natural gas more efficiently, thereby supporting FPL's and Florida's long term 11 plan to reduce greenhouse gas emissions. Additionally, to minimize environmental and other impacts, the proposed corridor of the Florida 12 EnergySecure Line would locate much of the Project along an existing 13 Commission-approved FPL transmission corridor. FPL witnesses Sharra and 14 15 Collins will discuss this in greater detail.
- 16

1

2

3

4

5

6

Finally, in contrast to the existing four pipelines serving the Florida market, the Florida EnergySecure Line will be regulated by this Commission. Therefore, the state will have control over the rates charged, the siting of the pipeline (through the Florida Department of Environmental Protection NGPSA process), and expansion approval authority.

Q. Has the Commission previously recognized the need to encourage pipeline infrastructure in Florida?

3 A. Yes. In approving both Progress Energy Florida's (PEF) and FPL's contracts for gas deliveries via the SESH, the Commission previously recognized the 4 5 need to increase the reliability of gas supply by gaining access to more on-6 shore gas, thus reducing the likelihood of disruptions due to weather events. Additionally, the Commission recognized that diversifying by supply basin is 7 8 important, because diversification increases reliability of supply and the 9 number of suppliers, which potentially can lead to fuel savings passed on to 10 FPL customers.

11

Three recent orders illustrate the Commission's commitment to expanding and 12 diversifying the sources of gas supply to Florida. In Order No. PSC-07-0294-13 PAA-EI, Docket No. 060793-EI, at page 5, the Commission said: "[w]e 14 believe diversifying by supply basin is important. Such diversification 15 increases reliability of supply. Also, diversification increases the number of 16 17 suppliers, which potentially could lead to fuel savings. Furthermore, having access to several supply basins protects against declining production, 18 19 temporary or permanent, in a particular basin."

20

Similarly, the Commission stated in Order No. PSC-06-1057-FOF-EI, Docket
 No. 060001-EI, at page 6, that: "[i]t is appropriate to diversify by supply basin
 and to pick up additional supply basins given the current dependence by

Florida utilities on the Gulf of Mexico and Mobile Bay area for supply, because those two areas are showing a decline in production."

2 3

4 Finally, the Commission's December 2007 "Review of 2007 Ten-Year Site 5 Plans for Florida's Electric Utilities," states the following at page 15: "[a]s the state's dependence on natural gas-fired generation continues to grow, gas 6 7 supply and deliverability become increasingly important. Therefore, utilities should continue evaluation of natural gas supply and delivery options, such as 8 9 liquefied natural gas, alternate gas pipelines, and natural gas storage. Having 10 multiple options can serve as risk mitigation to unforeseen supply and 11 delivery disruptions."

12

13

CONSEQUENCES OF DELAY OR DENIAL

14

Q. What would be the adverse consequences of delay in issuing an affirmative determination of need?

A. Any significant delay in the construction and in-service dates of the Florida
EnergySecure Line could jeopardize FPL's ability to supply natural gas to the
Modernization Projects in sufficient quantity and at the required gas pressure
when those projects go into service.

Q. What would be the adverse consequences of denying an affirmative
 determination of need?

A. The important thing to appreciate in this case is there is no viable "do nothing" alternative. Currently, the Cape Canaveral and Riviera Plants are connected to the east leg of FGT's pipeline system. Current contractual requirements only require a delivery pressure of 50 pounds per square inch. FGT's pipeline infrastructure must be upgraded to ensure delivery of 400 MMcf/d of natural gas to the modernized CCEC and RBEC facilities, at a much higher delivery pressure than is currently guaranteed by FGT.

10

If a determination of need is not granted in this case, FPL will most likely 11 contract with Company B for an expansion of their system with an increase in 12 delivery capability of 400 MMcf/d and with substantial infrastructure 13 increases needed to ensure proper operation of the Modernization Projects. 14 While this would meet the gas needs of the CCEC and RBEC, it would do so 15 16 at a higher life-cycle cost and would forfeit the numerous benefits of the Florida EnergySecure Line that I described above. The substantial reliability 17 benefits that will be realized by a third major pipeline into the state of Florida, 18 which accesses new gas supplies from sources outside of the Gulf of Mexico, 19 20 will be lost.

- 21 Q. Does this conclude your direct testimony?
- 22 A. Yes.

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		SUPPLEMENTAL TESTIMONY OF SAM FORREST
4		DOCKET NO. 090172-EI
5		MAY 29, 2009
6		
7	Q.	Please state your name and business address.
8	A.	My name is Sam Forrest. My business address is Florida Power & Light
9		Company, 700 Universe Boulevard, Juno Beach, Florida 33408.
10	Q.	By whom are you employed and what is your position?
11	А.	I am employed by Florida Power & Light Company ("FPL" or the
12		"Company") as Vice President of the Energy Marketing & Trading ("EMT")
13		Business Unit.
14	Q.	Have you previously submitted direct testimony in this proceeding?
15	A.	Yes. My direct testimony was submitted on April 7, 2009.
16	Q.	Have your position, duties, or responsibilities changed since you last filed
17		testimony in this docket?
18	A.	No.
19	Q.	What is the purpose of your supplemental testimony?
20	A.	The purpose of my supplemental testimony is to explain FPL's proposed
21		ratemaking treatment for the Florida EnergySecure Line and to describe how
22		FPL would make excess transportation capacity on the Florida EnergySecure
23		Line available to third party shippers. Finally, I will address why the

establishment of a separate entity is unnecessary, would unnecessarily create
 affiliate transactions, and add additional costs to FPL's customers.

3 Q. What ratemaking treatment does FPL propose for the Florida 4 EnergySecure Line?

- 5 A. FPL proposes to include all prudently incurred costs for the Florida 6 EnergySecure Line in FPL's electric utility rate base. As discussed in the 7 supplemental testimony of FPL witness James K. Guest, this ratemaking 8 treatment is appropriate because the predominant purpose of the Florida 9 EnergySecure Line is to serve the natural gas transportation needs of FPL's 10 electric generating units.
- 11

12 From the outset, 400 million cubic feet per day ("MMcf/d") of the Florida EnergySecure Line's initial 600 MMcf/d of capacity will serve FPL's 13 modernized Cape Canaveral and Riviera Beach units, which will generate 14 15 enough electricity to serve approximately 527,000 customers. Moreover, as 16 discussed in the direct testimony of FPL witness Juan E. Enjamio, under FPL's base case scenario, from 2013 FPL's gas need would grow by 17 approximately 1.6 billion cubic feet per day ("Bcf/d") by 2030 and 18 approximately 2.8 Bcf/d by 2040. Thus, it is not a matter of "if" but "when" 19 20 FPL will require additional natural gas transportation capacity equal to or 21 exceeding the full capacity of the Florida EnergySecure Line for its own needs 22 as an electric utility. As the Florida Public Service Commission ("FPSC" or 23 "Commission") recognized in Order No. PSC-97-0659-FOF-EM, Docket No.

961512-EM, at page 4, "it is not unusual for a utility to grow into the capacity
 of a large generating unit." The Florida EnergySecure Line should be viewed
 the same way because it will serve the immediate and long-term natural gas
 transportation needs of FPL's generation fleet to meet the growing electrical
 demands of FPL's customers.

Q. Would FPL pursue the Florida EnergySecure Line if the Commission excluded any portion of the prudently incurred costs of the project from FPL's electric utility rate base?

- The Florida EnergySecure Line was not developed as a strategic 9 No. A. investment asset for FPL Group, Inc. Rather, it was developed to meet FPL's 10 obligation to serve for the benefit of FPL's customers. FPL's goal is to 11 provide clean energy service at an affordable price to our electric customers, 12 while ensuring the highest level of reliability. The Florida EnergySecure Line 13 would further this goal because, as discussed throughout my direct testimony, 14 it provides the most cost-effective option for meeting FPL's immediate and 15 16 long-term gas transportation needs, while increasing the diversity of natural gas supply and adding to the reliability of the natural gas delivery system 17 18 infrastructure. FPL's customers will benefit directly from these economic and strategic advantages. 19
- 20

Additionally, as discussed in the direct testimony of FPL witness Robert G.
Sharra, FPL may be in a position to sell, directly or indirectly, capacity of the
Florida EnergySecure Line that initially exceeds FPL's electric-generation gas

requirements. Any revenues resulting from capacity releases or off-system transportation sales facilitated by the Florida EnergySecure Line will flow back to the benefit of FPL's customers through the Fuel Cost Recovery Clause. FPL's proposed pipeline is the most cost-effective option for customers irrespective of whether FPL makes any sales of excess capacity to third parties, and any such sales will only serve to improve the economics of the pipeline for FPL's customers.

8 Q. How does FPL plan to make excess capacity on the Florida EnergySecure 9 Line available to other entities in Florida?

10 A. FPL can either sell the excess capacity on the Florida EnergySecure Line to 11 third party shippers or it can utilize the excess capacity for its own needs and 12 release a like amount of capacity on either the Florida Gas Transmission 13 Company ("FGT") or the Gulfstream Natural Gas System ("Gulfstream") 14 pipelines to third party shippers. In all likelihood, FPL will retain and use 15 most of the Florida EnergySecure Line's excess capacity at the Martin Plant 16 and make an off-setting amount of capacity available off of either the FGT or 17 the Gulfstream systems due to their more comprehensive connectivity within 18 the state.

19

With respect to the option of releasing capacity on either FGT or Gulfstream,
FPL would follow the Federal Energy Regulatory Commission's ("FERC")
capacity release requirements to market the excess capacity. FERC has very
strict, standardized capacity release posting and bidding requirements in order

1		to ensure that capacity is awarded in an open and nondiscriminatory manner
2		and FPL would strictly adhere to these requirements. Capacity must be posted
3		and accessible to all interested parties on the pipeline's Electronic Bulletin
4		Board. Although the releasing party can set parameters for the release of
5		capacity, such as the term of the release, such parameters must be
6		nondiscriminatory. FERC also dictates the rules surrounding the capacity
7		release auction so that all releasing shippers abide by the same procedures for
8		the auction and award of capacity. With that being said, FPL does not intend
9		to make long term releases of its FGT or Gulfstream capacity as these original
10		contracts were purchased for specific delivery needs. FPL would look to
11		make short-term releases to bring additional value to its customers.
12		
13		To the extent that opportunities arise for FPL to sell excess capacity directly
14		off of the Florida EnergySecure Line, FPL would make the capacity available
15		in an open, transparent and non-discriminatory manner.
16	Q.	What transportation rates would you anticipate for off-system sales to
17		third parties?
18	Α.	If FPL finds itself in a position to make sales of Florida EnergySecure Line
19		capacity directly to third parties, it would seek approval from the FPSC for a
20		tariff pursuant to which FPL could negotiate rates for those sales consistent
21		with the principles of the Natural Gas Transmission Pipeline Intrastate
22		
22		Regulatory Act ("NGPIRA") in Chapter 368, Part II, of the Florida Statutes.

Q. Please explain further how the Commission would have the opportunity to review rates charged by FPL for any off-system sales.

FPL's proposed primary use of the pipeline is to serve FPL's native load and 3 A. not to engage in the transmission or delivery for sale of natural gas for 4 compensation. For that reason, FPL would not be a "natural gas transmission" 5 company" under the NGPIRA. However, if FPL markets gas transportation 6 service to third parties, the Company will file a separate petition with the 7 Commission requesting approval of tariffs in accordance with the principles 8 9 set forth in the NGPIRA. The tariffs would specify the general terms, conditions, and rules under which FPL would provide transportation service, 10 but the rates and charges would be negotiated individually with each customer 11 subject to the FPSC's oversight. After executing a transportation service 12 agreement, FPL and the third party customer would file an affidavit with the 13 14 FPSC affirming the reasonableness of the rates in accordance the principles 15 set forth in the NGPIRA.

Q. Does FPL believe it would be appropriate to address, in this proceeding,
whether limits should be imposed on FPL's ability to offer service to third
parties in order to address concerns about potential impacts to other gas
entities?

A. No. Consistent with prior Commission practice, the Commission can and
 should address the appropriateness of any such limitations when it reviews
 FPL's tariff filing, which will specify the terms, conditions, and rules under

- which FPL would provide service to third parties. It is unnecessary and would 1 be premature to address such issues in the context of this need proceeding. 2 Should the Commission require FPL to establish a separate entity if it 3 Q. engages in any sales of excess capacity to third parties? 4 No. The primary purpose of the proposed pipeline is to provide gas to FPL's 5 A. combined cycle plants. Within a relatively short period of time, FPL will 6 fully utilize the entire capacity of the pipeline. Any sales made prior to that 7 time would go directly to the benefit of FPL's customers. The establishment 8 of a separate entity is not necessary to achieve this benefit. Furthermore, 9 establishing a separate entity could unnecessarily trigger affiliate transaction 10 rules and generate legal, administrative, and on-going expenses that ultimately 11 These additional costs are 12 would be passed on to FPL's customers. 13 unnecessary because the Commission will have regulatory oversight through 14 the review of any tariffs governing any sales of excess capacity. FPL would still maintain accounting records related to the pipeline to permit the 15 identification of depreciation, operation and maintenance, and other costs to 16 17 develop a cost of service applicable to the pipeline.
- 18 Q. Does this conclude your direct testimony?
- 19 A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition to determine need for Florida) EnergySecure Pipeline by) Florida Power & Light Company)

Docket No: 090172-EI Served: July 24, 2009

ERRATA SHEET

DIRECT TESTIMONY OF SAM FORREST

EXHIBIT

PAGE # CORRECTION

SF-1

4 of 5

Replace "\$1.588" with "\$1.531"

The Revised Exhibit is attached.

Respectfully submitted this 24th day of July, 2009.

R. Wade Litchfield, Vice President and Associate General Counsel John T. Butler, Senior Attorney Florida Power & Light Company 700 Universe Boulevard Juno Beach, FL 33408 Telephone: (561) 304-5253 Facsimile: (561) 691-7135

and

By:

HOPPING GREEN & SAMS, P.A.

IIIN

Gary V. Perko Brooke E. Lewis 123 S. Calhoun Street (32301) P.O. Box 6526 (32314) Tallahassee, Florida 850-222-7500 Fax: 850-224-8551

Attorneys for Florida Power & Light Company

FPSC-COMMISSION CLERK 60 07574 JUL 24

DOCUMENT NUMBER-CATE

1	CHAIRMAN CARTER: You may proceed.
2	MR. BUTLER: Thank you.
3	BY MR. BUTLER:
4	Q. Mr. Forrest, would you please summarize your
5	direct and supplemental testimony?
6	A. Yes.
7	Chairman Carter, Commissioners, good morning.
8	Thank you for the opportunity to address you today.
9	The purpose of my direct and supplemental
10	testimony is to provide an overview of FPL's request for
11	an affirmative determination of need for the Florida
12	EnergySecure line. This request is as much about the
13	future of gas supply in Florida as it is for the
14	immediate need to supply gas to the modernizations at
15	Cape Canaveral and Riviera Beach.
16	FPL's goal is provide clean energy service at
17	an affordable price to its customers while ensuring the
18	highest level of reliability. FPL believes the proposed
19	intrastate natural gas pipeline helps meet this goal by
20	increasing the reliability of the natural gas
21	infrastructure in Florida, by continuing to diversify
22	sources and physical location of gas supply, and through
23	the potential to expand this new resource to meet future
24	natural gas needs.
25	The modernizations of FPL's Cape Canaveral and

FLORIDA PUBLIC SERVICE COMMISSION

Riviera plants will result in new natural gas generating facilities that require approximately 400 million cubic feet of natural gas per day. FPL does not currently have enough firm gas transportation capacity under contract to meet this increased need in addition to its already substantial gas transportation requirements.

1

2

3

4

5

6

7 FPL is already very dependent on natural gas as a fuel source. By 2011 it is projected that natural 8 9 gas-fired generation will supply over 60 percent of 10 FPL's energy needs, all being directly supplied by the 11 two incumbent pipelines, FGT and Gulfstream. FPL will 12 have roughly 1.3 billion cubic feet of firm 13 transportation service on FGT once their Phase 8 expansion is complete in 2011. Gulfstream will supply 14 15 an additional \$700 million cubic feet of FPL's daily gas 16 Together this is almost 2 billion cubic feet per load. 17 day, which on a peak day at maximum flow will serve 18 approximately 3 million FPL customers, all relying on two pipelines whose available gas transportation 19 20 capacity is almost fully subscribed.

By facilitating the introduction of a third major pipeline into and within Florida and offering a uniquely routed pipeline that has the potential to be connected at multiple points with the existing gas infrastructure of the state, the Florida EnergySecure

FLORIDA PUBLIC SERVICE COMMISSION

line will increase the reliability of gas delivery within Florida.

1

2

FPL conducted a comprehensive pipeline 3 solicitation aimed at increasing access to onshore 4 5 supply basins while adding to the reliability of the natural gas delivery system. Through this solicitation 6 process FPL determined that a self-built alternative, 7 the Florida EnergySecure line, when combined with the 8 proposal from Company E is the most strategic and 9 cost-effective solution available to meet the natural 10 11 gas demands of the modernization projects, as well as 12 having the overall effect of strengthening Florida's natural gas infrastructure and positioning it to meet 13 14 future natural gas transportation needs.

Understand this is not a core business 15 16 strategy for FPL, but rather a unique situation where a 17 self-built project provides the most benefits over the 18 long term. The combined proposals of the Florida 19 EnergySecure line with upstream transportation service 20 provided by Company E offered the reliability and diversity of supply benefits FPL sought, while improving 21 competition in Florida for the supply and transportation 22 23 of natural gas. The combined proposals also offer the 24 greatest economic benefit for FPL's customers, with well 25 over \$100 million in savings when compared to the next

FLORIDA PUBLIC SERVICE COMMISSION

closest alternative.

2 While the proposed pipeline into Florida would 3 be largely supplied from unconventional shale gas production in Texas, Arkansas, Oklahoma and Louisiana, 4 5 the addition of the upstream pipeline would also provide access to liquified natural gas and traditional Gulf 6 7 Coast supply through a large existing pipeline 8 infrastructure. Having access to several supply basins, 9 which the upstream pipeline offers, protects against declining production in a given supply basin. 10

11 FPL has proposed the Florida EnergySecure line 12 as an electric utility rate based asset, as the purpose 13 of this pipeline is to serve FPL's electric generation 14 fleet. However, FPL is committed to ensuring any temporary excess pipeline capacity available on FPL's 15 16 system as a result of the installation of the Florida 17 EnergySecure line will be offered to other entities in 18 the state in an open and nondiscriminatory basis.

Any revenues resulting from sales off of the new line from capacity releases on FGT or Gulfstream will flow back to FPL's customers through the fuel cost recovery clause. It is important to note, however, that FPL's proposed pipeline is the most cost-effective solution for its customers, irrespective of whether FPL makes any sales of excess capacity to third parties.

FLORIDA PUBLIC SERVICE COMMISSION

1 Any such sales will only serve to improve the economics 2 of the pipeline for FPL's customers. 3 There is not a viable do-nothing alternative 4 in this case. The need for additional gas at the 5 modernization projects dictates significant pipeline infrastructure must be added, whether it is through new 6 7 infrastructure such as the Florida EnergySecure line or 8 a substantial upgrade of the existing pipelines. 9 FPL believes the Florida EnergySecure line is 10 the best proposal for our customers to meet this 11 incremental need and also meet the strategic benefits of 12 fuel reliability and diversity. Thank you. 13 **MR. BUTLER:** I would tender the witness for 14 cross-examination. 15CHAIRMAN CARTER: Just before you go, 16 Mr. Self, hang -- just hold on for a second. 17 Staff, when we finish with this witness, I'll 18 come back to you for Witness Collins. Okay? I'll come 19 back to you. 20 MS. BROWN: Actually, Mr. Chairman, Witness 21 Collins has not been excused. 22 CHAIRMAN CARTER: Okay. Then I don't have to 23 worry about it then. 24 MS. BROWN: All right. 25 CHAIRMAN CARTER: Mr. Self, you may proceed. FLORIDA PUBLIC SERVICE COMMISSION

1	MR. SELF: Thank you, Mr. Chairman. Before I
2	start, Mr. Chairman, with your permission, we have a
3	confidential document that is, I believe, part of the
4	stipulated Exhibit Number 2 or 3.
5	If I can just ask staff counsel for a moment,
6	I don't see on the list that all of the confidential
7	interrogatory responses are listed there on Page 4 of
8	your document, but certainly with respect to the
9	enumeration of the responses it otherwise falls within
10	that.
11	MS. BROWN: Mr. Self, turn to Page 6 of the
12	exhibit list.
13	MR. SELF: Right.
14	MS. BROWN: Where we have the confidential
15	composite exhibit. And are you telling me that these
16	are not listed there?
17	MR. SELF: Yes. Like the one I'm going to
18	look at is FPL's response to FGT's first set of
19	interrogatories, Interrogatory Number 20.
20	MS. BROWN: All right. Well, I think probably
21	the best thing to do in this instance is to introduce
22	them at the time as you're crossing Mr. Forrest.
23	MR. SELF: Okay. Thank you.
24	With that, Mr. Chairman, I'd like to pass out
25	this confidential

FLORIDA PUBLIC SERVICE COMMISSION

CHAIRMAN CARTER: You may proceed. 1 MR. SELF: So, Martha, we want to give this a 2 3 number; is that what you're telling me? 4 MS. BROWN: Yes. 5 MR. SELF: Okay. MS. BROWN: Yes. And --6 MR. SELF: Mr. Chairman, could we get the next 7 number, please? 8 CHAIRMAN CARTER: Okay. Let's kind of turn on 9 10 over to the --MS. BROWN: That's Number 95. 11 CHAIRMAN CARTER: Okay. Hang on a sec. 12 This will be marked for identification as 13 Exhibit Number 95. And you had a nice -- you said --14 what did you say, Mr. Self? You said --15 MR. SELF: Yeah. For the record, Mr. 16 17 Chairman, this is FPL's response to FGT's first set of interrogatories, Interrogatory Number 20, which is 18 confidential. 19 CHAIRMAN CARTER: How about we say 20 Confidential Interrogatory Number 20? 21 22 MR. SELF: That's great. 23 CHAIRMAN CARTER: Commissioners, okay? (Exhibit 95 marked for identification.) 24 MR. SELF: I apologize for that confusion, Mr. 25

FLORIDA PUBLIC SERVICE COMMISSION

1 Chairman. That's okay. That's all 2 CHAIRMAN CARTER: right. I try to specialize in brevity. You may 3 4 proceed. 5 MR. SELF: Thank you. CROSS EXAMINATION 6 7 BY MR. SELF: 8 Good morning, Mr. Forrest. Floyd Self Q. 9 representing FGT. 10 Good morning. Α. 11 You have before you, Mr. Forrest, a red folder Q. 12 with a document that FPL has identified as containing 13 confidential information. I want to ask you a couple of 14 questions about that number, but I obviously do not want 15 you to disclose the number. 16 Α. Okay. 17 Now the confidential information on this Q. 18 document is the projected total cost of the Company E 19 proposed pipeline that will connect to the new FPL 20 intrastate pipeline; is that correct? 21 That is correct. Α. 22 So this cost would be in addition to the Q. 23 approximately \$1.6 billion cost of FPL's proposed 24 pipeline; correct? 25 Α. That is correct. I would say that the FLORIDA PUBLIC SERVICE COMMISSION

\$1.6 billion has been lowered with our -- I believe when 1 2 we filed our rebuttal testimony we also provided new economics. This number has been lowered as well with 3 that same, that same update. But, but you are correct 4 5 in terms of this is in addition to. Okay. When you combined these two costs, and, 6 Q. again, please don't verbally say what that total is, 7 it's FPL's position that the expenditure of this total 8 amount of money is in the long run cheaper for 9 ratepayers than the \$1 billion pipeline proposed by FGT; 10 11 is that correct? 12 Α. That is correct, yes. Now part of the reason FPL contends that the 13 ο. multi-billion-dollar cost for ratepayers is better for 14 15 ratepayers is because the pipeline is physically designed to ultimately carry 1.25 billion feet of gas; 16 17 is that correct? Well, that's what allows, I guess, fairly 18 Α. inexpensive, as is mentioned in our -- in numerous 19 20 testimonies that have been provided by FPL, I guess what we describe as inexpensive expansions of the system. 21 They are, you know, as, as the -- once the initial 22 infrastructure has been added, adding additional 23 infrastructure to increase the capacity of the pipeline 24 come at a very reduced cost to that initial installation 25

FLORIDA PUBLIC SERVICE COMMISSION

1

2

3

4

5

6

7

8

cost.

Q. Does the FGT proposed pipeline have the same basic specification as the combined FPL Company E pipeline? And by that I mean specifically does the FGT pipeline initially deliver 600 million cubic feet that could then be upgraded to 1.25 billion feet?

A. Which pipeline was that?

Q. FGT.

9 A. FGT's proposal was for 400 million cubic feet 10 a day.

11 Q. And this basic design that you're proposing, 12 the 600 million today upgradeable to 1.25 billion, the 13 FGT proposal does not have those specifications because 14 those exact specifications were not specifically 15 solicited; isn't that true?

FPL Witness Stubblefield can go through the 16 Α. details of the solicitation process in much greater 17 detail than I can. But at a high level, we started off 18 in early 2008 talking to a number of pipeline companies, 19 sort of prequalifying folks for interest in their, you 20 21 know, wanting us to deliver natural gas to, to the modernization project. So we started off by talking to 22 23 a number of companies. And when we were doing that, it 24 was during the, I guess the 2008 Ten-Year Site Plan was 25 available, which had us projected to build a couple of

more combined cycle facilities after the modernizations but prior to the addition of Turkey Point 6 and 7 new nuclear.

1

2

3

24

25

4 So at that time we were talking about anywhere 5 from 800 million cubic feet a day to 1.2 billion cubic 6 feet a day of gas infrastructure required to support 7 just our growth, not the state's growth, but just FPL's growth by about 2018 or so. Subsequent to that 8 9 obviously with the economy and with load projections lowering, we consistently updated each of the potential 10 11 participants in this process to lower those needs. We 12 ourselves looked at a 400 a day solution, we looked at a 600 million a day solution, and ultimately came upon the 13 600 million a day solution as proposed. 14

MR. SELF: Excuse me. Mr. Chairman, I really 15 don't think the witness's answer has at all been 16 17 responsive to the question I asked. First, I never heard him say yes or no. And then he's describing the 18 entire solicitation process. I didn't ask him about 19 I merely asked him if, if this is what was bid, 20 that. and it seems to me that's a yes or no kind of question. 21 22 CHAIRMAN CARTER: Mr. Forrest, if you could 23

answer yes or no, you may do so.

THE WITNESS: Sure.

CHAIRMAN CARTER: And then you'll be able to

1	explain your answer. But it would be most helpful to
2	THE WITNESS: Can you ask, reask your
3	question?
4	BY MR. SELF:
5	Q . Sure. Did the FGT proposal strike that.
6	The FGT proposal does not have the same
7	specification, 600 million now, 1.25 billion later,
8	because those specifications were not specifically bid,
9	yes or no?
10	MR. BUTLER: I'm sorry. I'd ask for
11	clarification. You say they were not specifically bid.
12	Do you mean did FPL specifically ask for them or did FGT
13	specifically provide that in its response?
14	BY MR. SELF:
15	Q. Did FPL specifically ask for a proposal
16	for 600 a pipeline that would deliver 600 initially,
17	that would be upgradeable to 1.25 billion?
18	A. No. However, I will say that through the
19	solicitation process and, again, Ms. Stubblefield
20	will go through it in much greater detail we asked
21	for everything from 400 million cubic feet a day all the
22	way up to 1.2 billion cubic feet a day, and really
23	everything kind of in between there. We asked for what
24	I'll describe as an the upstream pipeline section, so
25	that's the interstate pipeline section, and it might

1 actually be helpful to go to the map here and show this. 2 It's already on. Okay. 3 What I'll describe as the upstream section of 4 this pipeline, from Transco Station 85 down to FGT 5 Station 16, I'll describe this as the upstream portion 6 of the pipeline. Everything within the State of Florida 7 from Station 16 down would be considered to be the 8 downstream side of the proposal. And then just from Transco Station 85 all the way down to the 9 modernizations, we'll just describe that as the 10 interstate solution. 11 So there were really three different requests 12 that were made from counter-parties to make sure that 13 we, we got the best and most complete proposals from 14 15 everyone. So specifically we didn't ask for at the, at 16 the end of the day a 600 a day solution with the ability 17 to grow up to 1.2 billion cubic feet. But throughout 18 this process, which again was probably, you know, I 19 20 would describe it as maybe an eight- to ten-month 21 process, everybody had an opportunity to propose 22 anything from 400 million cubic feet a day all the way 23 up to the full Bcf and beyond. MR. BUTLER: Mr. Chairman? I'm sorry. 24 Mr., 25 Mr. Forrest is referring to an exhibit that's to

1 Mr. Sexton's testimony, Exhibit TCS-9. I don't know if 2 you have copies of that available conveniently to you 3 there. But if you don't and would like a copy of what 4 is blown up over here on the board, I'd be happy to 5 distribute these. 6 CHAIRMAN CARTER: If you have a portable copy, 7 make sure you give one to Mr. Self, and we'd be more 8 than happy to look at it. 9 MR. BUTLER: Yes. Thank you. CHAIRMAN CARTER: I thought it was a map of 10 11 Iraq for a moment there, the way you had it. 12 (Laughter.) 13 Mr. Self, you may proceed. MR. SELF: Thank you, Mr. Chairman. Just for 14 the record, Mr. Chairman, there are a number of 15 witnesses that have different maps, which I'm assuming 16 those witnesses may or may not get into based upon what 17 the cross-examination is. 18 CHAIRMAN CARTER: That'll be fine. 19 You may 20 proceed. 21 MR. SELF: Thank you. BY MR. SELF: 22 Now, Mr. Forrest, the FGT proposal is only for 23 Q. 400 million cubic feet a day of gas, which is what the 24 Cape Canaveral and Riviera Beach modernization projects 25 FLORIDA PUBLIC SERVICE COMMISSION

1	combined will require; correct?
2	A. Correct.
3	Q. And in terms of existing or approved gas-fired
4	electric plant, except for the Cape and Riviera plants,
5	FPL already has under contract sufficient gas
6	transportation to fuel those other power plants;
7	correct?
8	A. Currently, yes. And with the expansion of
9	FGT's Phase 8 project, which will deliver an additional
10	400,000 per day, that should be enough gas to supply all
11	of our needs at that time, and that's 2011 time frame.
12	Q. So that covers all of your authorized power
13	plants as of today; correct?
14	A. Correct. Including West County 1, 2, and 3,
15	which are in various stages of construction. Correct.
16	Q. Okay. Now in order to fuel the modernization
17	programs for the Cape Canaveral and Riviera Beach
18	plants, did FPL plan 20 years ago for the gas
19	transportation capacity to serve those two plants?
20	A. Not that I'm aware of, no.
21	Q. Ten years ago?
22	A. Again, not that I'm aware of. I've been with
23	FPL for about two years, so.
24	Q. All right. In fact, in your 2008 application
25	for approval of those modernization proposals, didn't
	FLORIDA PUBLIC SERVICE COMMISSION

1 FPL indicate that it was still considering its options 2 for gas transportation for those two plants? 3 Α. That is correct. And if FPL's petition is approved in this 4 Q. 5 docket, there will be sufficient time to build the 6 transportation capacity to serve those two plants; 7 correct? 8 Α. Yes. 9 And, likewise, if the Commission denies your Q. 10 pipeline and FPL contracts with FGT to build the 11 transportation capacity to serve those two plants, there 12 is sufficient time to build that capacity on a timely 13 basis as well; correct? 14 That is, that is my understanding. Yes. Α. Now once the Cape and Riviera plants come 15 0. online in 2013 and 2014, FPL is not anticipating any new 16 17 gas generating plant coming online until 2021; correct? 18 That is correct. I believe that's the, that Α. 19 is in Witness Enjamio's original direct testimony. 20 That's correct. 21 All right. And so FPL is going to have Q. 22 200 million cubic feet of excess gas available to it 23 every day until that next new gas generating plant comes 24 online in 2021; correct? 25 That is correct. And that is built into the A. FLORIDA PUBLIC SERVICE COMMISSION

1 economic analysis that demonstrates that on a life cycle 2 basis the FPL proposal in combination with the Company E proposal is the most cost-effective proposal by over 3 4 \$100 million. There is no, there is no credit given at 5 all to that excess 200 during the initial years. 6 So the point is you're paying for the 0. 7 200 million, and it's FPL's position that, 8 notwithstanding the fact that you're buying 200 million cubic feet of gas every day that you don't 9 need, under FPL's position that's still more economic? 10 11 Yes, that is correct. I think it might be Α. 12 helpful -- we filed a late-filed exhibit. I guess it 13 wasn't late-filed. It was a response to a staff Interrogatory Number 145, which laid out the capital 14 15 costs. I'm not sure if we have that available to look 16 at. 17 Well, I'm not asking you about the capital Q. 18 costs at this time. Well, I think it's important to understand how 19 Α. the capital costs work. We were, we're talking about a 20 400,000 a day pipeline versus a 600,000 a day pipeline, 21 with, with maybe a misunderstanding that, you know, a 22 400 a day pipeline is two-thirds of the capital cost of 23 a, of a, of a 600 a day pipeline. I think the exhibit 24 itself, or the interrogatory response itself is fairly 25

telling in terms of how much a pipeline costs and how 1 much it takes to add compression to that facility. 2 3 MR. SELF: Well, but -- Mr. Chairman, 4 obviously this witness has filed extensive testimony. There's extensive interrogatory responses. I'd really 5 like for him to just focus on the questions that are 6 7 being asked, if I may, please. CHAIRMAN CARTER: Mr. Forrest, stay, try to 8 9 stay focused. 10 MR. BUTLER: Mr. Chairman, I'm sorry. 11 CHAIRMAN CARTER: Mr. Butler. 12 MR. BUTLER: I do have to respond to Mr. Self's comment. I think Mr. Forrest's answer is 13 14 precisely focused. He's trying to explain why building, you know, 600 MMcf per day instead of 400 MMcf per day 15 initial capacity makes sense, which is exactly the line 16 17 of questioning that Mr. Self is pursuing. So the fact that it goes in a direction Mr. Self doesn't like is not 18 19 something that makes it inappropriate testimony. 20 CHAIRMAN CARTER: Not necessarily inappropriate testimony. But if you kind of stay 21 focused, that would be helpful. Because I'm sure with 22 23 the volume of exhibits and witnesses and their testimony 24 here, we can get there. So let's move forward. 25 Mr. Self, you're recognized. FLORIDA PUBLIC SERVICE COMMISSION

1	MR. SELF: Thank you, Mr. Chairman.
2	BY MR. SELF:
3	Q. Now a condition of Company E building the new
4	upstream pipeline is that FPL must commit to taking
5	600 million cubic feet a day of gas and paying the
6	demand charge associated with that 600; correct?
7	A . That is correct. As with any intra
8	interstate pipeline that was, that was offered into the
9	solicitation process, for new infrastructure there was
10	very little interest in the pipeline community offering
11	400,000 a day into the, into the process. That is
12	correct.
13	Q. And just to be clear, the I think we've
14	previously you indicated that the next gas generating
15	plants come online in 2021; correct?
16	A. I believe that is correct.
17	Q. And those power plants have not been approved
18	by this Commission yet; correct?
19	A. That's correct.
20	Q. Assuming all of FPL's forecasts are correct,
21	when would you expect FPL to petition this Commission
22	for a determination of need to construct, say, the plant
23	that's supposed to be on, in service in 2021?
24	A. I would assume, you know, as with any power
25	plant that we bring in front of this Commission,
	FLORIDA PUBLIC SERVICE COMMISSION

1	probably, you know, three to five years prior to that,
2	depending upon what the purpose of it is to serve and,
3	and just exactly when the need is. We'd be in there
4	three to five years in advance of that.
5	Q. So that would be somewhere in the 2016 to 2019
6	time frame?
7	A. Okay.
8	Q. And I understand that FPL under FPL's
9	proposals and forecasts, the FPL pipeline will not
10	require its first upgrade until 2023; correct?
11	A. Of I'm sorry. Could you ask the question
12	again? I'm not sure which
13	Q. Sure. The first incremental upgrade to the
14	FPL pipeline is not scheduled under your current
15	forecast to occur until 2023; is that correct?
16	A. I'd have to see Mr. Enjamio's exhibit to know
17	that for sure, but that sounds about right. Yes.
18	Q. Okay. I want to ask you a couple of sort of
19	broad questions about your supplemental direct testimony
20	for a moment, if I may.
21	My first question is how many affiliate
22	companies does FPL have?
23	A. I don't know the answer to that question.
24	Q. Are there any that you're aware of?
25	A. Any affiliate companies of FPL?
	FLORIDA PUBLIC SERVICE COMMISSION

1	Q. Yes.
2	A. Yes.
3	Q. Okay. And do you know whether FPL's regulated
4	utility operation buys or sells goods or services to any
5	of those affiliated companies?
6	A. Yes.
7	Q. And do you know how many affiliate companies
8	there are in FPL Group?
9	A. No, I do not.
10	Q. But there are some?
11	A. Yes.
12	Q. And do you know how many of those affiliates
13	FPL would buy or sell goods and services from?
14	A. No, I do not.
15	Q. You would certainly agree with me that one of
16	the FPL witnesses in this proceeding is employed by FPL
17	Group; correct?
18	A. That is correct. Yes.
19	Q. All right. At this time I'd like to turn
20	specifically to your supplemental direct on Page 7, and
21	specifically I want to talk about Lines 10 through 12.
22	A. Okay.
23	${f Q}$. Have you quantified the expenses associated
24	with the legal, administrative and other expenses
25	associated with having the pipeline in a separate
	FLORIDA PUBLIC SERVICE COMMISSION

entity?

1

2

A. No, we have not.

3 **Q**. Now I'd like to kind of change gears for a 4 moment here and ask you, are you familiar with a 5 mechanism that was created in the stipulation to FPL's 6 2005 rate case that allowed for generating plant to be 7 automatically included in base rates, avoiding the need for a concurrent rate case? And I think generically 8 9 this is known as a generation base rate adjustment. 10 CHAIRMAN CARTER: Mr. Self, break it down. Ι think you gave him like multiple questions, and we want 11 12 to kind of break it down here. Okay? BY MR. SELF: 13 Let's try the end question first. Are you 14 Ο. familiar with something known as a generation base rate 15 16 adjustment? 17 Generally, yes. Α. Okay. Do you recall when we took your 18 Q. deposition a couple of weeks ago -- well, maybe the 19 20 easiest thing is do you have a copy of your deposition 21 transcript with you? 22 I do not. No. Α. 23 Does your counsel have a copy of your Q. 24 deposition transcript? CHAIRMAN CARTER: Mr. Butler, do you have a 25 FLORIDA PUBLIC SERVICE COMMISSION

1 copy of his deposition? 2 MR. BUTLER: A copy of Mr. Forrest's 3 deposition? 4 CHAIRMAN CARTER: Yes, sir. 5 MR. BUTLER: Yes. CHAIRMAN CARTER: Yes, sir. Let's do this. 6 Let's do this, Commissioners. Let me give you a stretch 7 8 break and give Linda an opportunity to update her communication system there. Let's, let's take five. 9 We'll be back at ten of. Thank you. 10 11 (Recess taken.) 12 Okay. We are back on the record. 13 Mr. Self, you're recognized. MR. SELF: Thank you, Mr. Chairman. Ι 14 15 appreciate that. BY MR. SELF: 16 17 Mr. Forrest, I believe now you have a copy of 0. 18 your deposition --19 Α. Yes, I do. -- transcript. And we're looking at Page 54, 20 Q. down at the bottom of that page. I asked you a question 21 about whether you would file a rate case to recover the 22 costs of the intrastate pipeline. Could you please read 23 your answer at Lines 22 to 24 there? 24 25 Α. Yes. FLORIDA PUBLIC SERVICE COMMISSION

1 "The latter. We would file a rate case at the 2 time or whatever the appropriate mechanism is at that time, but not until it goes into service." 3 Thank you. Would the generation rate 4 0. Okav. 5 base adjustment be one of the mechanisms at that time that you're contemplating for recovering the costs of 6 7 this pipeline? 8 Α. No, not that I'm aware of. No. But it certainly is your intent to have the 9 Q. 10 pipeline classified as electric utility plant; correct? 11 A. That is correct. 12 So what other mechanisms might you be Q. 13 contemplating, if you know of any? 14 I don't have any other mechanism in mind. I'm Α. 15 not sure what comes out of our existing rate case or 16 anything else. The primary -- or actually as it is 17 currently designed, the sole, I believe, mechanism 18 available to us would be a rate case. Okay. If the Commission finds that there's 19 0. 20 sufficient demand for a new pipeline, would that be a 21 good result for FPL? 22 Α. I'm not sure I understand the question. 23 Well, if the Commission makes an affirmative Q. 24 finding that there is sufficient demand to build a new 25 pipeline, would that be a good result for FPL? FLORIDA PUBLIC SERVICE COMMISSION

Well, I think it would be a good result for 1 Α. 2 FPL's customers. Okay. And if the Commission determined that 3 Q. FPL's pipeline as proposed and the Company E pipeline 4 was the best way to serve that demand, that would be a 5 6 good result as well, would it? Again, yes, for FPL's customers, absolutely. 7 Α. All right. But a finding that the pipeline 8 Q. 9 should be in a separate corporate entity and that all of 10 the costs of building, maintaining and operating that pipeline should be in a separate entity, if that finding 11 12 is made, FPL will not build the pipeline; correct? 13 That is what we have said, yes, that is Α. 14 We believe we have an obligation to provide correct. 15 reliable service, reliable electric service to our 16 customers. In meeting that obligation, we, we have to 17 study long-term investments on any, any asset, whether 18 that be a, a generator or a pipeline or a transmission 19 line. And when we make the appropriate decision to the 20 benefit of our customers, our investors, you know, they 21 expect to be adequately and fully compensated for that 22 investment. 23 You know, if it's suggested that we would keep

You know, if it's suggested that we would keep some portion of the asset out of, out of rate base, by definition our customers or our investors are not being

24

25

FLORIDA PUBLIC SERVICE COMMISSION

adequately and fully compensated, and as such we would 1 2 not pursue the project. MR. SELF: Mr. Chairman, just for the record, 3 the deposition transcript is a part of that giant 4 5 composite Exhibit Number 4. I just wanted to state that 6 for the record. Thank you, Mr. Forrest. I have no further 7 8 questions. 9 THE WITNESS: Okay. 10 CHAIRMAN CARTER: Commissioners, I want to go 11 to staff unless -- I want to go to staff, and then I'll 12 come back to the bench. 13 Staff, you're recognized. 14CROSS EXAMINATION 15 BY MS. BROWN: 16 Good morning, Mr. Forrest. How are you? Q. 17 I'm well. Thank you. A. 18 Good. Now I think you've stated FPL's Q. 19 position that the EnergySecure line would be placed in 20 FPL's rate base and entitled to earn a return on equity 21 as approved by the PSC; correct? 22 Α. That is correct. 23 Can you -- you talked with Mr. Self just a Q. 24 second ago about when you would come in for a rate case 25 to recover the costs of the project, and you said when FLORIDA PUBLIC SERVICE COMMISSION

the project is placed in service. Could you tell us what the current proposed in-service date of the project is?

1

2

3

17

4 Α. Currently proposed as January 1st of 2014. Okay. Now if you'd turn to Page 11 of your 5 Q. 6 direct testimony. You indicate that FP&L will have 7 access to additional capacity on the upstream pipeline. 8 And we wanted to ask is the upstream pipeline, to your 9 knowledge, reserving additional capacity should you need additional capacity in the future, which it seems to me 10 11 you're contemplating?

A. If I understand your question correctly, would
they have capacity available for us beyond the 600 that
is contemplated?

15 Q. Yes. Thank you for phrasing my question much
16 better than I did.

A. I was just making sure I was clear.

The upstream supply, the Company E proposal is for 600 a day starting on January 1st of 2014 as well, or starting around 2014. I'm not sure of the specific date of the start.

But the, their project as proposed is expandable, but I wouldn't say that they are reserving anything for us, nor have we committed to buy anything from them beyond the initial 600. If at such time that

1 we need additional gas, we will go back to them and, and 2 talk to them about potential supply, but we'll talk to 3 others as well. And -- I'm sorry. 4 Ο. That's okay. Please finish. No. 5 Α. I was just going to say, and we'll make the 6 appropriate decision at that time, whatever it is, 7 whether we want to go back to Station 85 or to 8 Perryville or to Zone 3. You know, there's all kinds of 9 different supply points, and we'll make that assessment 10 at that appropriate time. 11 Well, at that time, if you did go back to the Q. 12 upstream pipeline and ask for additional capacity, 13 wouldn't they have to apply to FERC for an expansion 14 project and have it approved before additional capacity 15 would be available? 16 Α. That is my understanding. Yes. 17 Would you agree that the major benefit to **Q**. 18 FPL's shareholders if this project is completed is the increase in FPL's rate base? 19 20 I would say probably any question around rates Α. 21 is probably just a little bit outside of the scope of my 22 personal area of expertise. 23 Q. Well, then, let's, let's turn to your 24 deposition transcript on Page 63, Lines 1 through 14. 25 Are you there? FLORIDA PUBLIC SERVICE COMMISSION

1

2

3

4

5

6

22

23

24

25

A. Yes.

Q. And there you were asked the question, "Could you similarly list the major benefits to FPL's shareholders if the project is completed?"

Could you read that answer?

A. Yes, ma'am.

7 "Well, I quess the one benefit is it's an 8 increase in our rate base and that would be the benefit. 9 I mean, this is -- this was not developed as a strategic 10 alternative to enter the gas business, so to speak. 11 We're not looking to enter the gas business. This was a 12 specific unique opportunity to propose a project that 13 wound up being the best alternative for our customers, and that's specifically why it was proposed, was for our 14 15 customers."

16 Q. But you did say in the beginning of that 17 answer that the benefit would be an increase in FPL's 18 rate base; correct?

A. Yes, I did. Yes, ma'am. I am certainly not a
rates expert nor do I understand how that works. This
was an attempt to be responsive, I suppose.

Q. Okay. Do you agree that since the proposed pipeline is within the jurisdiction of the Florida Public Service Commission, the Commission will have oversight of all costs, cost overruns and prudence of

1 the project? 2 Α. Yes. Yes, we do. 3 Q. Okay. In your deposition at Page 63, Line 25, 4 through Page 64, Lines 1 and 2, you state that you are 5 not sure that there are risks associated with the 6 EnergySecure line that you wouldn't associate with other 7 pipelines as well. Do you see that? 8 Α. That is correct. 9 Wouldn't you agree though that FPL and thus Q. 10 its ratepayers would have more implied liability risks 11 if it owned the pipeline than if it leased capacity on 12 other companies' pipelines? 13 What, what type of risks? Α. 14 What do I mean by implied liability risks? Q. 15 Yes, ma'am. Α. 16 I mean explosions, other unforeseen force Q. 17 majeure events that might occur. Yeah. I think I follow your questioning. 18 Α. 19 I mean, if it's, if it's owned and operated by Yes. 20 FPL, there is a risk associated with that. Yes. 21 Q. Okay. Thank you. 22 How does FP&L plan to ensure against those 23 risks? 24 I'm not sure the final decision has been made: Α. 25 Either through self-insurance or insuring the pipeline FLORIDA PUBLIC SERVICE COMMISSION

with an outside entity. We have discussed both. I'm 1 not sure a final decision has been made. 2 MS. BROWN: Mr. Chairman, if I might just have 3 a minute. 4 CHAIRMAN CARTER: Take your time. Nobody 5 leaves. This is kind of a run-in-place. 6 7 (Pause.) BY MS. BROWN: 8 Q. Mr. Forrest, we're passing out some responses 9 to staff's discovery. 10 11 A. Okay. We probably don't need to address every one, 12 0. 13 but I wanted everyone to have a copy for reference if we 14 need it. 15 CHAIRMAN CARTER: Okay. MR. BUTLER: Ms. Brown, is this part of the 16 composite exhibit, discovery? 17 MS. BROWN: Yes, it is. It's already been 18 19 introduced into the record. 20 MR. BUTLER: Okay. 21 CHAIRMAN CARTER: This is just for ease of 22 cross-examination; is that right? 23 MS. BROWN: Yes. 24 CHAIRMAN CARTER: Okay. 25 Commissioners, while they're passing that out,

just for planning purposes -- I didn't do it this 1 morning. Let me do it now to give you some kind of -- I 2 know that you have other things that you're going to try 3 to do during the, the lunch hour. Just for planning 4 purposes, we'll probably take a lunch break around 12:30 5 and come back at 1:45. So that'll give you an 6 opportunity to kind of plan from there. Okay? 7 8 Ms. Brown. BY MS. BROWN: 9 Mr. Forrest, you just said that you haven't 10 Q. made any final decisions on how you would insure against 11 the risks of the pipeline. Would you agree that there 12 are several different alternatives? 13 Yes. That's my understanding. Yes. 14 Α. 15 Q. Can you describe them? That is probably outside the scope of my area 16 Α. 17 of expertise. Well, then who do you think could answer these 18 Q. 19 questions? I don't mind reserving them as long as I 20 know somebody can answer them along the way. 21 Α. That's a good, that's a good question. I mean, I could have you read the responses to 22 Q. 23 the interrogatories. Yeah. I mean, we could, we could do that. 24 Ι Α. 25 would probably defer to Witness Collins. FLORIDA PUBLIC SERVICE COMMISSION

	1
1	Q. Okay. Well, let's we'll try that.
2	A. Okay.
3	MR. BUTLER: Mr. Chairman?
4	CHAIRMAN CARTER: Mr. Butler.
5	MR. BUTLER: I would note that the exhibits
6	that were passed out by staff here, I'm sorry, the
7	interrogatory answers that were passed out by staff,
8	some of these were sponsored by Mr. Sharra. It may be
9	appropriate we'll try to get with staff in the time
10	between witnesses, but it may be that some of these it
11	makes sense to raise with Mr. Sharra.
12	CHAIRMAN CARTER: Okay. Thank you,
13	Mr. Butler. And also too, if some other witness comes
14	up, just give them a heads up on what may be appropriate
15	for the witness. We'll do that. Thank you.
16	MR. BUTLER: Thank you.
17	MS. BROWN: Thank you, Mr. Butler.
18	CHAIRMAN CARTER: Ms. Brown.
19	BY MS. BROWN:
20	Q. Would you agree that increasing the rate base
21	by the approximate 1.5 billion cost of the proposed
22	pipeline improves the financial wherewithal and
23	financial strength of FPL?
24	A. Again, from my deposition, I assume, again,
25	probably an attempt to be responsive as opposed to being

FLORIDA PUBLIC SERVICE COMMISSION

the expert on the subject. I would probably defer that 1 2 to a, to a rates expert. Well, why don't we read your deposition again. 3 Q. Well, yes, certainly I will. 4 Α. You can turn to Page 64, Lines 14 through 17. 5 Q. "Will the proposed pipeline make FPL 6 Α. 7 financially stronger?" And my response was, "I think any time you 8 increase your rate base, it improves the financial 9 wherewithal of the company." 10 I think that's, that'll probably be fine. 11 **Q**. 12 A. Okay. Also in that deposition at Page 64, Lines 3 to 13 Q. 13, you stated that the proposed pipeline will not 14 increase or decrease the financial risks to FP&L and its 15 16 shareholders; correct? 17 Α. That was my response, yes. 18 Q. Okay. 19 MR. BUTLER: I'm sorry. Ms. Brown, where are 20 you reading in his deposition? 21 MS. BROWN: Page 64, Lines 3 through 13. 22 MR. BUTLER: Okay. Thank you. I guess I 23 would prefer, if possible, Mr. Forrest to simply read in his answer, if that's what you're referring him back to, 24 25 or you read it to him.

FLORIDA PUBLIC SERVICE COMMISSION

1	MS. BROWN: Sure.
2	BY MS. BROWN:
3	Q. You want to turn to Page 64?
4	A. Yes, I'm there. You want the question and the
5	answer or just
6	Q. Yes, the question and the answer.
7	A. All right. Thank you.
8	It says: "Will the proposed pipeline increase
9	or decrease the financial risk to FPL and its
10	shareholders?"
11	"I don't know that it" my response was, "I
12	don't know that it does necessarily either increase or
13	decrease. I think what it, what it does is it certainly
14	for our customers puts control of the delivery of gas
15	into our hands. You know, at least as it pertains to
16	this portion of gas supply for the 600 million of day
17	one of install, it gives us the opportunity to gain
18	control of that gas."
19	Q. All right. Thank you.
20	Are you aware of any investor-owned monopoly
21	electric utility that has a minimum of 100 miles of high
22	pressure, large diameter, long distance transmission
23	pipeline included in its electric base from which it
24	earns an overall rate of return?
25	A. I am not familiar with any, any utility that

FLORIDA PUBLIC SERVICE COMMISSION

I don't know if there is or is not one. I might does. 1 add, I don't know what the -- I don't believe that 2 there's any limit to the size of it. If it's for the 3 primary purpose of delivering gas to a particular 4 natural gas-fired generator, electric generation, that 5 there is any limit to the, to the size. But I'm not 6 7 aware of one that is larger or smaller than. 8 Q. All right. Thank you. You're welcome. 9 Α. Now currently FPL recovers all its costs for 10 Q. transporting natural gas through the fuel clause; is 11 12 that correct? Yes. For the contracts that we have signed 13 Α. 14 with FGT, Gulfstream, and on the Southeast Supply 15 Header, SESH, we recover those through the fuel clause. 16 That is correct. 17 And FPL does not earn a rate of return on the Q. 18 transportation of natural gas currently; correct? That is correct. For those three contracts, 19 Α. 20 that is correct. 21 Q. If FPL builds this pipeline and its proposal 22 to include it in electric rate base is approved, FPL 23 will for the first time be earning a rate of return on 24 the transportation of natural gas; correct? 25 I might defer the specifics of that to, to A. FLORIDA PUBLIC SERVICE COMMISSION

1	Mr. Sharra.
2	Q. All right.
3	A. As I'm not entirely positive if our existing
4	oil and gas line, the 18-inch line that's referred to in
5	this case is in base rates or if it's passed through the
6	fuel clause. I'm not entirely sure of that, or any
7	other gas or oil facilities that we have.
8	Q. Right. And that's the 36-mile line?
9	A. That is correct.
10	Q. Okay. All right. We'll ask Mr. Sharra that.
11	In fact, I think if you'll give me just a
12	minute, we may save the rest of our questions for
13	Mr. Sharra.
14	I have now three oddball questions that we
15	don't know who, who can answer, so perhaps you all can,
16	can help. If you can't answer them, Mr. Forrest, just
17	direct us to who can.
18	A. Okay.
19	Q. Okay. Has FP&L included costs related to
20	FPL's proposed EnergySecure line in its rate case filing
21	in Docket Number 080677-EI?
22	A. No, we have not.
23	Q. Not in account 183.560?
24	A. I'm not sure of a specific account. No.
25	Q. Okay. Based on FPL's proposed accounting
	FLORIDA PUBLIC SERVICE COMMISSION

treatment, will FPL begin to accrue AFUDC on costs 1 incurred beginning January 2010? 2 I would defer that question to, to, I believe, 3 Α. Mr. Sharra. 4 Okay. Under FPL's proposal, will FPL continue 5 Q. to accrue AFUDC -- well, this may be deferred to 6 7 Mr. Sharra as well. See, I'm glad I asked you. And that's all the 8 questions we have. Thank you, Mr. Forrest. 9 CHAIRMAN CARTER: Thank you. 10 Commissioner Skop, you're recognized, sir. 11 12 COMMISSIONER SKOP: Thank you, Mr. Chairman. 13 Good morning. THE WITNESS: Good morning. 14 COMMISSIONER SKOP: Just if I could draw your 15 attention to Page 6 of your prefiled testimony, Lines 17 16 17 through 19, please. 18 THE WITNESS: Okay. COMMISSIONER SKOP: And starting on Line 18 19 you stated that "FPL does not currently have enough firm 20 21 gas transportation capacity under contract to meet this 22 increased need for natural gas resulting from the 23 modernization projects that will be coming online." 24 I guess my question would be, does this 25 conclusion encompass the additional firm capacity that

FLORIDA PUBLIC SERVICE COMMISSION

FPL has already contracted for under the expansion to 1 the FGT Phase 8 pipeline? 2 THE WITNESS: That is correct. That is 3 4 correct. COMMISSIONER SKOP: Okay. 5 THE WITNESS: The -- to be clear, 6 Commissioner, the Phase 8 expansion on FGT's system is 7 to supply additional gas to the West County 3 -- or not 8 additional gas, but to supply gas to West County 3, to 9 supply additional gas to West County 1 and 2 beyond what 10 was purchased. I believe our original purchase from 11 Gulfstream, I believe, was 345,000 a day. Those units 12 can actually run up to 200,000 a day each, so that was 13 14 additionally on the Phase 8. We bought some additional gas for West County 1 and 2 as well as to deliver on a 15 firm basis to the Turkey Point facilities. So all in, 16 it was the 400,000 need on --17 COMMISSIONER SKOP: Okay. Thank you. And I 18 19 just wanted to turn your attention to Interrogatory 20 Number 157 that I guess Ms. Brown had mentioned. And do you have that in front of you? 21 22 THE WITNESS: I believe I do. 23 **COMMISSIONER SKOP:** Okay.

24 **THE WITNESS:** One fifty --

25

COMMISSIONER SKOP: 157.

FLORIDA PUBLIC SERVICE COMMISSION

THE WITNESS: 157. Yes.

1

2

3

4

5

6

7

25

COMMISSIONER SKOP: Okay. And this, I guess, touches upon something in Mr. Sharra's testimony where he spoke about the 36-mile dual fuel pipeline between the Riviera Beach terminal and the Martin plant. Are you familiar with that pipeline?

THE WITNESS: Yes, I am.

COMMISSIONER SKOP: With respect, I guess, to 8 the question presented in the interrogatory, staff had 9 asked whether FPL was aware of any investor-owned 10 utility that had a minimum of a 100-mile contiguous 11 (phonetic) interstate pipeline, and it also was brought 12 up by Mr. Self's question about that this had been 13 never, never been done before in terms of putting it 14 15 into base rates.

Are you aware for Item 4, being the 36-mile pipeline from the Riviera to the Martin plant, is that currently included in FPL's base rates, that pipeline itself?

20 **THE WITNESS:** I am not aware. I actually 21 deferred to Mr. Sharra on the, on that particular item 22 with Ms. Brown.

23 COMMISSIONER SKOP: Okay. I'll just reserve
24 my questions for him.

Thank you, Mr. Chair.

CHAIRMAN CARTER: Thank you. Anything further from the bench? Just, Commissioners, while you -- I'll come back to you just in case you want a last-minute question.

1

2

3

4

5 I just had one question in the context of the 6 capacity about -- I think Mr. Self asked you a series of 7 questions regarding the initial bids, and I think that 8 you said that you were not part of that -- you knew 9 globally how it worked, but you really weren't into, to 10 use my terms, into the weeds of the, of the contract and 11 process in terms of the proposals that were submitted.

Do you know why the decision was made to go from an initial 400,000 -- let me get, see if I can check my notes here -- to go from 400 million cubic feet to 1.6 billion?

The initial proposals that 16 THE WITNESS: Yes. were received, we received proposals from both of the 17 18 incumbents, FGT and from Gulfstream, for a complete supply of 400,000 a day to meet the needs of the 19 20 modernizations. The, you know, the capital costs incurred -- when we look at our own project, the Florida 21 22 EnergySecure line, I'll speak specifically to that. 23 Looking at the Florida EnergySecure line, we initially looked at a proposal that could deliver 400,000 a day, 24 25 but the incremental costs incurred to go to a 600,000 a

day solution were, you know, miniscule in looking at the 1 overall -- and I'll walk you through the, the actual 2 numbers here for a second. 3 The -- there's really two different pipeline 4 diameters that we could look at to deliver 400,000 a 5 day. There's a 24-inch pipeline and a 30-inch pipeline. 6 Obviously a 30-inch pipeline is going to have greater 7 throughput in the long run and have more long-term 8 scalability in just the economies of scale allowing you 9 to do greater things with that pipe. 10 But just looking at a 24-inch pipeline 11 delivering only 400,000, or 400 million cubic feet a day 12 as designed, if we were just to lay -- instead of 13 proposing today a 30-inch, we propose a 24-inch going to 14 Canaveral, Martin, and Riviera, the capital cost of that 15 project would be \$1.36 billion. Okay? So it's 1.36. 16 17 The 30-inch/600 a day proposal that we have in 18 front of the Commission for approval, the capital cost on that 30-inch/600 million cubic foot a day is 19 1.53 billion. It's \$170 million of incremental costs. 20 And I don't mean to dismiss the \$170 million as being 21 22 miniscule. It's not miniscule. But what you gain for spending that additional dollars is, is absolute 23 scalability in the long run. And that's, that's how 24 25 when, when Mr. Stelf (sic.), excuse me, when Mr. Self

spoke to the combined proposal from Company E, the confidential document that you looked at earlier, along with our own proposal, how the capital costs, when you compare that to FGT's \$1 billion, I believe they've said, proposal, that's how these things work out is that in the long run this thing is highly scalable and very inexpensively.

1

2

3

4

5

6

7

A 30-inch -- and this is another comparator --8 a 30-inch/400 a day project can be installed for 9 \$1.52 billion, or 1.516 to be specific. Again, our 10 proposal for 600 a day is 1.53. It's a difference of 11 \$15 million. And how you get that is it's the exact 12 same pipe, it's the exact same process to install it. 13 14 You have to dig a trench, lay the pipe, weld it, test 15 it, go through that entire process. It's the addition of one turbine in the compressor station. It's a 16 \$15 million turbine is what allows you to grow from 17 18 400,000 a day to 600,000 a day on a 30-inch pipe.

And we do consider that to be a minor expense. It's 1 percent of the overall cost is what allows you to go from that 400,000 a day to 600,000 a day solution.

22 So, you know, I felt like there was some 23 confusion as, as to a 400,000 a day project, you know, 24 costing two-thirds of what a 600,000 a day does. They 25 basically cost the same amount. That's why we've

proposed a 600,000 a day solution. It just provides good sense.

1

2

3 So then as you scale this project further, so 4 once you go to 800,000 a day or a Bcf a day, a 30-inch 5 pipeline will allow you to deliver all the way up to 1.2 6 Bcf a day before you have to ever add any additional 7 pipe to the mainline. Those are hundred-million-dollar 8 expansions, not billion-dollar expansions that we're 9 looking at now.

You know, FGT's proposal to add 400,000 a day 10 is about a billion dollars. And that's because they've 11 12 already gone through the, what I'll describe as the inexpensive compression expansions of their system. Now 13 14 every time they come back to, to do an addition for FPL or for anybody else in the state, they have to add 15 hundreds of miles of pipe in some cases or several miles 16 17 of pipe that wouldn't be required, you know, at least along the mainline in the proposal that we've put in 18 front of the Commission. They're very inexpensive 19 20 expansions over time.

21 **CHAIRMAN CARTER:** Let me ask you this, and if 22 you're not the right witness, then fine. But I think 23 also in response to some questions that Mr. Self asked 24 you, if I heard you right, and of course my writing has 25 gone cold on me, so I can't really read it right now, is

FLORIDA PUBLIC SERVICE COMMISSION

that there's a discourse about the savings to the 1 ratepayers or customers. I think you said savings to 2 3 the customers. THE WITNESS: That's correct. There's a 4 projected savings to our customers. 5 CHAIRMAN CARTER: Walk me through that. Ι 6 wanted to follow that train of thought with you on that. 7 Walk me through that, how that works. 8 THE WITNESS: Okay. The specifics of how it 9 works I would defer to Witness Enjamio --10 CHAIRMAN CARTER: Okay. 11 THE WITNESS: -- who actually ran all of the 12 analysis and is responsible for --13 14 CHAIRMAN CARTER: Witness? 15 THE WITNESS: Enjamio. 16 CHAIRMAN CARTER: Okay. THE WITNESS: Good Lord, please don't ask me 17 18 to spell it. 19 CHAIRMAN CARTER: Okay. I'll wait. 20 Mr. Butler, you can help me. THE WITNESS: E-N-J-A-M-I-O, I believe. 21 But, but at a high level, the way the analysis 22 23 is run is to look at a 40-year time horizon. It's a customer present value revenue requirements analysis. 24 25 So he looks at all the dollars that your customers will

FLORIDA PUBLIC SERVICE COMMISSION

spend with, with different scenarios run.

So we looked at it with the FGT -- it's part 2 of our overall system. It's a complete dispatch of the 3 entire system over 40 years. So he, he looks at the 4 incremental cost to our customers of having the FGT 5 proposal in place and the complete cost of having the 6 FPL proposal in place along with the Company E. And 7 then as expansions are needed, those expansions are 8 9 added in, and then he just continues to run the 10 analysis.

And ultimately what it shows is basically on a present value basis, over the course of that analysis, the FPL proposal along with the Company E upstream proposal is \$118 million, I believe is the number, \$118 million better than the FGT proposal.

CHAIRMAN CARTER: Okay. Now let me, let me 16 use my country perspective on this. Is that -- I guess 17 what you're saying, and let me kind of say this and then 18 I may have a question on that, is that in the process, 19 20 and again, I'm not going to get into the weeds of the 21 contracting because you said that's not your deal in 22 terms of the proposals that were submitted and all, but I guess from a high level standpoint, as you looked at 23 it, you're saying that the cost of contracting with FGT 24 25 to expand their capacity to bring additional gas to the

plants and versus the company going out with this other 1 perspective and building the pipeline is cheaper. 2 I mean, that's from a -- that's about as kind 3 of commonsensical as I can break it down. Is that, is 4 5 that -- did I read that right? THE WITNESS: Yeah. I hate to describe it as 6 7 cheaper per se. CHAIRMAN CARTER: Okay. More, more 8 economical. How about that? 9 THE WITNESS: It's more economic. It is. A 10 couple of things in play. One is when FGT proposed 11 their Phase 8 expansion, which is what Commissioner Skop 12 referred to earlier, we were the anchor tenant of that, 13 of that particular project. It's a 400,000 a day 14 15 solution delivering gas to, to Martin County essentially. That, that project is a \$2.5 billion 16 17 project. Okay. So it sort of gives you the scope of 18 the project that they're looking --19 CHAIRMAN CARTER: What size is that pipe? 20 Excuse me. Don't lose your train of thought, but what 21 size is that pipe? 22 THE WITNESS: That's an 800,000 a day 23 pipeline. 24 **CHAIRMAN CARTER:** So that's a 30-inch? 25 THE WITNESS: I'll --FLORIDA PUBLIC SERVICE COMMISSION

1	
1	CHAIRMAN CARTER: Oh, okay. Go ahead.
2	THE WITNESS: I'll defer to the experts. But
3	what I will say is I wouldn't describe it as what size
4	is that pipe.
5	CHAIRMAN CARTER: We're talking about the
6	capacity?
7	THE WITNESS: Only because they have a
8	significant amount of infrastructure in place. So
9	they've got, you know, compressor stations all along the
10	Panhandle down into Florida. They have a number of
11	areas where they have multiple sections of pipe running
12	side by side by side. This Phase 8 expansion would add
13	a significant amount more pipe along with upgraded
14	compressor stations and potentially another compressor
15	station in addition to what they already have. That
16	project is only about 75 percent subscribed, as I
17	understand it.
18	So they have about 200 million, roughly
19	speaking, and Witness Sexton can speak more specifically
20	about what they do have available. But they have
21	roughly about 25 percent of that pipe is available.
22	Part of what they have proposed to us in their
23	most recent proposal actually included part of that
24	capacity as well. So it's their existing proposal to
25	us, as I understand it, was a billion dollars, but
	FLORIDA PUBLIC SERVICE COMMISSION

they're also taking credit for what they spent on the 1 Phase 8 and haven't (phonetic) added that into the 2 amount. So I'm not sure how that math works 3 necessarily, but that sort of gives you an idea of their 4 last couple of expansions and the dollars spent to make 5 that work. 6 But by contrast, what we're proposing with 7 this 30-inch/600 million cubic foot a day pipeline, the 8 next expansion to go to 800 million a day is about 9 \$125 million is my understanding. Now that doesn't 10 include any interconnects or laterals that would have to 11 12 be built. But just in terms of the mainline expansion, it's about \$125 million. 13 To go to the next quantity, to go up to a 14billion or, you know, if that's where we're headed, that 15 next, that next 200 a day to get to the billion is 16 17 another \$125 million. So that's how, when you look at it on a life 18 cycle basis, adding in this inexpensive capacity later 19 20 on really makes up for, you know, what is being spent up-front to make this work. 21 CHAIRMAN CARTER: Okay. Commissioner Skop. 22 COMMISSIONER SKOP: Thank you, Mr. Chairman. 23 24 I just had a few more questions that I did not get to 25 previously.

FLORIDA PUBLIC SERVICE COMMISSION

Mr. Forrest, I quess I just wanted to cover 1 three additional points. First and foremost, the 2 contingency planning regarding getting firm gas 3 supply -- I quess the subject of this need determination 4 proceeding. 5 But in order to get gas supply, firm gas 6 supply to both the modernization plants in Riviera Beach 7 and Cape Canaveral, three things need to happen first 8 and foremost. You need the upstream pipeline to be 9 completed, you need a need determination from this 10 Commission, and then the pipeline itself would need to 11 be constructed by the in-service date of January 1, 12 13 2014; is that correct?

14THE WITNESS: That is correct, Commissioner.15COMMISSIONER SKOP: Okay. With respect to the16upstream pipeline, given the current natural gas17pricing, is that pricing sufficient to support continued18development, exploration and delivery of the19nontraditional sources of natural gas, i.e., the shale20from the Midcontinent to that, I guess, Transco 85?

THE WITNESS: Yeah. We believe it is. Witness Sexton can go through sort of the prevalence of that shale gas, development, rig counts, how all that kind of factors into our long-term analysis. He can go through that in some detail for you.

FLORIDA PUBLIC SERVICE COMMISSION

But at a high level, absolutely, we do believe that it does support at least maintaining where we are today and growing from there.

1

2

3

25

One of the unique things about Station 85 is 4 that a number of producers, actual independent producers 5 of this shale gas, the Mid-Continent shale gas, a number 6 7 of producers have taken out pipeline capacity to get specifically to Station 85. There is about 3 Bcf of new 8 pipeline capacity entering the Station 85 market with no 9 significant additional takeaway capacity being built 10 away from there other than what we have proposed and 11 Transco's own work around that station as well. 12

But of that, of that 3 Bcf coming into Station 13 85, you know, roughly 80 percent of it or so has been 14 subscribed to producers that are looking to push their 15 gas as far east as they can. That's one of the things, 16 17 as we interviewed a number of pipeline companies as well 18 as a number of independent producers discussing, you know, the relevance of Station 85 in terms of how it 19 might fit into our portfolio, it was one of the things 20 21 that really highlighted for us that producers are 22 serious about their own gas as well as selling at 23 Station 85 was the fact that they were willing to take 24 out these long-haul capacity contracts.

COMMISSIONER SKOP: Okay. Thank you. And

FLORIDA PUBLIC SERVICE COMMISSION

with respect to the construction of this pipeline if it were approved by the Commission, what would happen if there were a substantial construction delay, to the extent that this Commission has previously approved about \$2.5 billion for both of the modernization plants that are scheduled to come online, and what is the contingency plan if construction delays were to occur associated with this pipeline?

1

2

3

4

5

6

7

8

9 **THE WITNESS:** Right. It's a question that we 10 have definitely contemplated ourselves. There's a 11 couple of things that we have done.

One is we've started this process really five 12 years prior to, or four and a half years prior to the 13 14 gas being needed. Part of that being the -- just the regulatory process for the Natural Gas Transmission 15 Pipeline Siting Act is fairly untested, so we wanted to 16 make sure we gave ourselves a fair amount of time to get 17 18 through that process and then to get through the 19 construction process as well.

The short answer is we've done contingency planning around both Cape Canaveral and Riviera with respect to workarounds that are potentially -- we put in place, which would allow us to get gas there in the short term. Now, again, that would be, you know, depending upon whether the upstream supply was there on

January 1st of '14, we would have the incremental gas to 1 be able to deliver it. Or if it wasn't there by 2 January 1st of 2014, we could at least -- the Canaveral 3 and Riviera units would by far be the most efficient on 4 our system, so they're going to get dispatched prior to 5 the rest of our gas fleet. We could at least move gas 6 up to those facilities and work in the interim until we 7 get the overall pipeline online. 8 I would say probably Witness Sharra can get 9 into that in terms of the workarounds in a little more 10 11 detail. COMMISSIONER SKOP: Okay. Thank you. And 12 13 then three more additional questions. I don't know if you have it before you, but do 14 you have Mr. Langston's direct testimony? 15 16 THE WITNESS: I do not. 17 COMMISSIONER SKOP: Mr. Butler, can I give you my copy, generally speaking. And I guess I just want 18 19 him to agree or disagree with the statements there. 20 MR. BUTLER: Sure. COMMISSIONER SKOP: Okay. I don't have my 21 22 document in front of me, so I'm going to go from memory. But I believe it's on Page 9 of 45 of Mr. Langston's 23 testimony, if I'm correct. And he suggests that with 24 25 some minimal additions, i.e., additional compression,

the excess capacity on Phase 8 could be used to meet the 1 need of the Riviera plant. Based on the lines that I 2 have highlighted there, would you agree or disagree with 3 Mr. Langston's assertion? 4 THE WITNESS: Yeah. I would, I would agree 5 with what he says there. If I could just caveat that. 6 COMMISSIONER SKOP: And on that, on top of 7 that, is, is that a stopgap solution, i.e., a Band-Aid, 8 or is more additional gas going to be required? 9 THE WITNESS: I don't know if I would describe 10 it as a stopgap. I'm not sure FGT has interest -- and I 11 12 don't want to speak for any of the FGT folks, but I'm assuming they don't want to make a one- or two-year sale 13 14 with that Phase 8 capacity. I'm sure they're looking to, to sell it on a longer term basis. I'm assuming a 15 16 stopgap, as you refer to it, would be a, you know, a 17 year or two until we got ours online. COMMISSIONER SKOP: What I meant by that would 18 19 be, that would be firm capacity limited to the extent that I think they're looking for an additional 200,000 20

that I think they're looking for an additional 200,000
or 200 million. I think I got that right. It's hard.
I don't have it in front of me. Yes. That additional
capacity, and that would be all they'd be able to
deliver in terms of additional incremental capacity. So
they would not be able to deliver as much throughput as,

FLORIDA PUBLIC SERVICE COMMISSION

say, a new pipeline would. Is that your understanding of that?

1

2

THE WITNESS: Well, that is, that is my 3 understanding. I will say that -- this kind of goes to 4 my earlier point. When they proposed their Phase 8 5 expansion, they actually built, as I understand it, or 6 have proposed to build a 30-inch pipeline, which will 7 connect their, their western leg to their eastern leg 8 going north of Lake Okeechobee. That's a 30-inch 9 pipeline, which, you know, from my earlier discussion, 10 really is kind of oversized for a 400,000 a day 11 delivery, which, which is what that pipeline will 12 13 deliver under Phase 8. So they have the ability to deliver additional gas through that pipe. They have 14 oversized it. And it sort of goes to our own point as 15 to why a 30-inch pipeline with 600,000 a day is the 16 17 right number. Just scalable, it's -- they can, they can 18 grow it.

Their Phase 8 capacity, again, Witness Sexton can probably go into that, what is available on the Phase 8 capacity in a little more detail than I can. But that Phase 8 capacity I think is what they've suggested here is available to deliver down using that new 30-inch pipeline that they're building for Phase 8, which would then go into, into the Riviera facility.

But it also misses the fact that the 18-inch line that 1 we're utilizing as part of our proposal still requires a 2 substantial amount of capital investment in order to 3 make that solution work. So that's not, that's not 4 5 accounted for here. COMMISSIONER SKOP: Okay. And to that point, 6 the, the dual fuel line that you just mentioned, that 7 does not currently have the lateral over to Riviera 8 9 Beach; is that correct? THE WITNESS: I believe it, it does. Again, 10 I'll defer the specifics of the engineering design to 11 12 Mr. Sharra, not to continue to dump into his lap, but he 13 is the expert on it. COMMISSIONER SKOP: Okay. 14 THE WITNESS: But there is a way to get over 15 16 to the, at least the 45th Street terminal. COMMISSIONER SKOP: It's very close. 17 THE WITNESS: Which is very close. It's 1.8 19 within 3 miles, I believe. 20 COMMISSIONER SKOP: Okay. And then one final 21 question. Mr. Butler mentioned this in his opening 22 statement, and in your testimony it's referred to in 23 multiple places, but we talk about the new pipeline 24 being able to displace existing capacity either on the 25 FGT or Gulfstream Pipeline.

You know, I know that if additional capacity 1 was displaced -- in your prefiled testimony it talks 2 about, you know, off-system sales or being able to sell 3 that capacity to others. What about the, the sunk costs 4 5 in terms of what was initially required to reserve that capacity? Are we essentially, you know, displacing 6 capacity that a premium has already been paid for for 7 8 that capacity?

THE WITNESS: The answer to your question is, 9 is, yes, that those costs would continue to be paid for. 10 11 So when we looked at the project again, you know, a 400,000 a day solution was essentially the same capital 12 13 costs for us as it was for a 600,000 a day solution. So this -- the notion of excess per se almost comes not 14 free of charge but relatively inexpensively in the grand 15 16 scheme of the overall project.

17 It's the same way that -- not to speak again 18 for Company E, because that's their own business, but 19 they have a certain revenue requirement, and that's how 20 they establish their rate is, is through that revenue 21 requirement, similar to how the utility would do it 22 under their ratemaking.

But when, when Company E sets their rate, whether they do it on 400,000 or they do it on 600,000, they still have the same revenue requirement at the end

FLORIDA PUBLIC SERVICE COMMISSION

of the day. So it just changes the denominator. 1 It would just cause your pricing to go up, and it's not 2 exactly 50 percent, but it's roughly 50 percent is about 3 the price of the increase by having a lower denominator, 4 the 400,000 a day. That's where we got to the 600,000 a 5 day solution. It's just the right thing to do. It 6 7 makes the most sense from a long-term growth 8 perspective.

9 You know, as that, as that pertains to the overall project, you know, it just provides a tremendous 10 amount of growth in the future, both, both on their 11 12 system and our system. Again, they're sizing their project similarly to how we are, which would allow them 13 14 to grow into it as well. Whether they sell it to other entities in the State of Florida or they sell it to FPL, 15 16 ultimately it just provides for additional gas into the state coming in from a different third unique supply, 17 18 supply point.

19 COMMISSIONER SKOP: Thank you.
20 CHAIRMAN CARTER: Thank you, Commissioner.
21 Commissioners, anything further?
22 MR. SELF: Mr. Chairman?
23 CHAIRMAN CARTER: Mr. Self.
24 MR. SELF: If I could please request, just for
25 clarification purposes with respect to Commissioner

Skop's question, I don't think the page -- so the record 1 is clear when we're reading this transcript later, if we 2 could identify what page. If the witness could say what 3 4 page. COMMISSIONER SKOP: That's fine with me. 5 THE WITNESS: What are you -- I'm sorry. 6 MR. BUTLER: You need us to refer to the page 7 number in Mr. Langston's testimony? 8 THE WITNESS: That's Page 9 of 45 on 9 Mr. Langston's. I'm sorry. 10 COMMISSIONER SKOP: So I was correct earlier. 11 12 THE WITNESS: You were. 13 CHAIRMAN CARTER: Is that clear enough, Mr. Self? 14 15 MR. SELF: Yes. CHAIRMAN CARTER: That's clear enough for you? 1617 MR. SELF: Thank you. 18 CHAIRMAN CARTER: Okay. Hearing nothing 19 further from the bench, Mr. Butler, you're recognized 20 for redirect. 21 MR. BUTLER: Thank you. 22 REDIRECT EXAMINATION BY MR. BUTLER: 23 24 Mr. Forrest, you were just asked by Q. 25 Commissioner Skop about the costs that -- I guess he, I FLORIDA PUBLIC SERVICE COMMISSION

think he referred to them as sunk costs that would be, have been paid for, excuse me, the existing commitments on the FGT and Gulfstream lines that might be released to, for third-party sales in the event of, or during the period of excess capacity.

1

2

3

4

5

6

7

8

9

Are those sunk costs taken into account in FPL's economic analysis of the EnergySecure line that shows it to be approximately \$100 million superior to the FGT proposal?

Yes, they are. The analysis, and, again, 10 Α. 11 Mr. Enjamio can get through it in more, in more detail, 12 but the analysis assumes on day one a need of 400,000 a day. So, again, by definition there's 200,000 a day of 13 excess capacity available on our system. We don't defer 14 any costs. We don't, we don't hide the fact that there 15 is this excess. It's taken all into full account with 16 17 respect to the analysis itself.

18 So the cost that we have on FGT, the cost that 19 we have on Gulfstream both, as well as the small 20 additional cost on our own capital project are all 21 factored into the analysis. There's no deferral of 22 those costs. There's no pulling it out and assigning it 23 somewhere different.

And with all of that still intact, it still shows that the FPL project, in combination with Company

E, is still the best proposal by the some hundred 1 million dollars that you, that you mentioned. 2 Thank you. Mr. Forrest, Ms. Brown asked you a 3 0. couple of questions about the recovery of, excuse me, 4 sorry, of charges paid for transportation capacity to 5 the existing pipelines that's recovered through the fuel 6 clause, and she contrasted that to the EnergySecure line 7 where there would be a return paid on the investment in 8 the pipeline. Do you remember those questions? 9 Α. Yes. 10 Okay. What is your understanding as to 11 0. whether, when FPL customers are paying a charge that FPL 12 has had to pay in turn to FGT or Gulfstream, whether 13 those charges reflect a return to FGT and Gulfstream on 14 15 the pipeline investment? Yes, I believe they would include a rate of 16 Α. 17 return for the, for their parent company. And that return, would that return be 18 Q. recovered through the charge through the fuel clause for 19 20 that transportation capacity? 21 Α. Yes. It all, it all comes in in the form of one demand charge. So whatever, you know, their revenue 22 requirements are based on, you know, their capital 23 24 outlay, their O&M charges, the facilities included in 25 the project as well as their own rate of return. So it

FLORIDA PUBLIC SERVICE COMMISSION

would all be reflected in the demand charge that we then 1 pass through the fuel clause. So, yes, it does include 2 3 a rate of return. Ms. Brown also asked you whether if the Q. 4 Company E upstream pipeline were expanded in the future 5 to provide more than 600 MMcf to FPL, that there would 6 be need to be FERC approval for the expansion. Do you 7 8 remember those questions? 9 Α. Yes. Okay. Would expansions of FGT or any other 10Q. incumbent pipeline that provides gas to FPL in order to 11 provide additional supplies to FPL also require FERC 12 13 approval? 14 Α. That is my understanding. Yes. MR. BUTLER: Mr. Chairman? 15 16 CHAIRMAN CARTER: Yes, sir. 17 **MR. BUTLER:** I am going to distribute a copy of Interrogatory Number 145, the answer to Interrogatory 18 145, which is part of the composite exhibit too that 19 staff has identified and the parties have stipulated to. 20 21 But just for clarification, there have been I think at 22 least two runs through what this interrogatory shows 23 regarding the comparison of the 400 to 600 MMcf pipeline 24 economics. And I'd ask Mr. Forrest simply to describe 25 briefly, because I know he's already run through some of

this with you, but I'd like for him to describe briefly 1 what this interrogatory shows so that you can see on 2 3 paper at the same time that he is explaining the comparison of the different pipeline sizes and costs. 4 5 MR. SELF: Mr. Chairman, I --CHAIRMAN CARTER: Mr. Self. 6 7 MR. SELF: Yeah. I think I need to object. This is already in the record. This is, strikes me as 8 9 trying to -- it goes far beyond the scope of redirect. He's asking additional questions about information 10 11 that's already otherwise in the record. 12 MR. BUTLER: Mr. Chairman? 13 CHAIRMAN CARTER: Yes, sir. 14 MR. BUTLER: I'm not asking Mr. Forrest to 15 introduce any new information into the record. First of 16 all, as Mr. Self acknowledges, the exhibit itself 17 already is in the record. But what Mr. Forrest did in 18 response to your questions was kind of run through 19 orally, without the benefit of the exhibit before you or 20 of the interrogatory answer before you and the other 21 Commissioners, the logic and the information that was 22 presented here. And I'm simply asking Mr. Forrest to 23 briefly describe what the interrogatory answer shows, 24 where hopefully doing so with the tables and the 25 information included here before you would make it

FLORIDA PUBLIC SERVICE COMMISSION

clearer and easier to understand.

2 MR. SELF: And, Mr. Chairman, again, this is 3 already in the record. They've got testimony for nine 4 witnesses that they're presenting here today that 5 discuss all of these, all of this information multiple 6 times already. I -- this just seems far beyond the 7 scope of, of redirect.

8 CHAIRMAN CARTER: I think that there's -- let 9 me hear from Ms. Helton first, because I'm thinking that 10 some of the questions that I had asked are related to 11 this and some of the questions that were asked from the 12 bench. And obviously the Commissioners will give it 13 whatever weight it deserves. So I don't think there's 14 any, any harm in letting it in.

15

Ms. Helton?

MS. HELTON: Mr. Chairman, if I understand correctly what Mr. Butler has told you, he's simply going over again questions that you asked him about and clarifying and making sure that he got the information he gave you correct. And if it would help you, I think it's appropriate for him to answer these questions.

22 **CHAIRMAN CARTER:** I do remember asking the 23 question about the capacity. You guys remember when I 24 was asking about that? And, as I said, we can give it 25 the weight, whatever weight it deserves. It's already

2

3

4

5

6

7

8

9

10

11

as an exhibit and all, but it does help.

You may proceed.

THE WITNESS: Okay. Thank you. There are five cases presented here, and I'll go through each one of them hopefully fairly quickly.

The two 24-inch cases show the costs, the capital costs associated with doing a 24-inch pipeline at either 400 or 600 million cubic feet a day. And the capital costs are the fixed pipe and everything that goes into the fixed capital of the project, along with the labor to install it.

12 It shows you how much horsepower is needed 13 from a compression perspective, the cost, the capital 14 cost of that compression, which totals the total capital 15 cost. There's a column in there that says Annual Fuel 16 Costs. I'll talk about that briefly in a second, but 17 ignore that. It's not part of the total capital costs. 18 AFUDC and then the total cost in the right-hand column.

So a 24-inch/400 million a day project is \$1.36 billion. The 24-inch/600 a day solution comes up to 1.438. Now as designed by us at the operating pressures that we have designed, that 24-inch pipeline is essentially full at the 600 a day level. Any additional expansion beyond 600 million a day on a 24-inch pipeline would require the installation of

additional pipeline.

So we would have to go back in, disrupt the 2 right-of-way, disrupt the landowners, lay new pipe in 3 the ground. And that essentially is kind of how FGT 4 adds incremental capacity to their system is by 5 continually adding additional pipe, higher compression 6 and just continuing to add on to their system. So 7 there's, there's, you know, sections of their, their, 8 their pipeline that have three or four pipes laying side 9 by side by side to get up to the maximum quantities that 10 11 they need to deliver.

On the 30-inch, that's the last three that are 12 shown there, there's a 400 a day, a 600 a day, and then 13 the maximum throughput of a 30-inch pipeline, again, at 14 the pressures we have designed, is 1.25 billion cubic 15 feet a day. So you're able to expand that 30-inch 16 pipeline all the way up to 1.25 before you would ever 17 18 have to add that additional pipe on the mainline to deliver additional volumes of gas. So this thing is 19 highly expandable well beyond what a 24-inch can do. 20

And you can see on the right-hand side what the total cost of each of these facilities is. The 30-inch at 400 a day is 1.56 -- 516, excuse me. The 600 a day total is 1.531. So there's only \$15 million of incremental capital costs required to go from 400 to

600, and that's the 15 that I mentioned earlier and that 1 Mr. Butler mentioned in his opening statement. 2 Finally, the 30-inch at 1.25 billion cubic 3 feet a day totals 1.72. Now I mentioned 125 million for 4 5 a couple of expansions. I believe this assumes that all 6 of it was installed on day one. It doesn't show like sort of the incremental cost of adding it over time, 7 so -- but the expansions to get up to that full 1.25 are 8 9 very inexpensive, again, when you compare it to the 10 overall capital cost of the project. 11 In that Annual Fuel Cost column, it shows what 12 using additional horsepower from a fuel consumption 13 perspective does to, does to the costs. So at a 600 a 14 day solution, the 24-inch pipeline at our fuel 15 projection spends about \$26 million a year just running 16 the compressors. So that's just the variable cost of 17 running the compression stations. 18 By contrast, a 30-inch at 600 a day is about 19 \$8 million a year. So when you contrast the 24- and the 20 30-inch pipelines, there's about \$18 million in 21 difference just in fuel costs, which, which, you know, 22 on a present value basis more than makes up for the 23 difference in the install cost of those two projects. 24 And that's, that's why we lean towards the 25 30-inch project and that's why we went with the 600 a

FLORIDA PUBLIC SERVICE COMMISSION

day. It just, it just fit right when you looked at the 1 overall project. It just had, it had good scalability 2 in the long run and it made good sense for our customers 3 4 in the short term too. MR. BUTLER: Thank you. That's all the 5 redirect that I have. 6 CHAIRMAN CARTER: Okay. Exhibit s? 7 MR. BUTLER: Move the admission of Exhibit 5. 8 9 CHAIRMAN CARTER: Are there any objections? 10 Without objection, show it done. (Exhibit 5 admitted into the record.) 11 12 MR. SELF: And FGT would move Exhibit 95. 13 MR. BUTLER: No objection. 14 CHAIRMAN CARTER: Without objection, show it 15 done. 16 (Exhibit 95 admitted into the record.) 17 Do we have anything -- do we have anything 18further for this witness? Will this witness come back 19 for rebuttal or is --20 MR. BUTLER: He will be back for rebuttal, 21 yes. 22 CHAIRMAN CARTER: Okay. Okay. So you're on 23 recess. You're not exactly excused. 24 THE WITNESS: All right. Thank you. 25 CHAIRMAN CARTER: Call your next witness. FLORIDA PUBLIC SERVICE COMMISSION

MR. BUTLER: Thank you. 1 MR. PERKO: Thank you, Mr. Chairman. FPL 2 calls Mr. Robert Sharra. 3 CHAIRMAN CARTER: Mr. Sharra, while you're 4 coming up, you know that they deferred a lot of things 5 that you're the go-to guy, so. 6 COMMISSIONER SKOP: Mr. Chair, could I also 7 get my document back from Mr. Forrest? 8 CHAIRMAN CARTER: Oh, yeah. Mr. Forrest, 9 would you give Commissioner Skop back his document? 10 Hang on one second, Mr. Perko. 11 12 (Pause.) Okay. Mr. Perko, you may proceed. 13 14 MR. PERKO: Thank you. ROBERT SHARRA 15 16 was called as a witness on behalf of Florida Power & Light Company and, having been duly sworn, testified as 17 18 follows: 19 DIRECT EXAMINATION 20 BY MR. PERKO: Mr. Sharra, could you please state your full 21 Q. name and business address for the record. 22 My name is Robert Sharra, 700 Universe 23 Α. Boulevard, Juno Beach, Florida 33408. 24 And, Mr. Sharra, have you been sworn today? 25 Q. FLORIDA PUBLIC SERVICE COMMISSION

Yes, sir, I have. 1 Α. Mr. Sharra, did you cause to be filed and, 2 Q. prepare and cause to be filed in this proceeding direct 3 testimony consisting of 23 pages? 4 Yes, sir, I did. 5 Α. And did that testimony also include exhibits 6 Q. prelabeled RGS-1, RGS-2, RGS-3 and RGS-4 that have been 7 now identified on staff's Comprehensive Exhibit List 6 8 9 through 9? Α. Yes, sir. 10 Do you have any changes or corrections to your 11 0. prefiled direct testimony? 12 I believe there was one noted change that was 13 Α. part of errata. I don't have that with me. That 14 changed the total capital cost of the project. 15 That change is included in the errata that we 16 Q. 17 submitted on July 24th? Yes, sir. 18 Α. Thank you. Other than that change included in 19 Q. 20 your errata, if I were to ask you the questions in your 21 testimony today, would your answers be the same? 22 Yes, sir. Α. And do you have any changes to the exhibits 23 Q. 24 that I identified? 25 Α. No, sir. FLORIDA PUBLIC SERVICE COMMISSION

1	MR. PERKO: At this time, Your Honor, we would
2	ask that Mr. Sharra's prefiled direct testimony be
3	included in the record as if read.
4	CHAIRMAN CARTER: The prefiled testimony of
5	the witness will be inserted into the record as though
6	read.
7	(Exhibits 6, 7, 8 and 9 marked for
8	identification.)
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
	FLORIDA PUBLIC SERVICE COMMISSION
	FLORIDA FUBLIC SERVICE COMMISSION

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF ROBERT G. SHARRA
4		DOCKET NO. 09EI
5		
6	Q.	Please state your name and business address.
7	А.	My name is Robert G. Sharra. My business address is Florida Power & Light
8		Company, 700 Universe Boulevard, Juno Beach, Florida 33408.
9	Q.	By whom are you employed and what is your position?
10	А.	I am employed by Florida Power & Light Company ("FPL" or the
11		"Company") as Director of Project Development in the Energy, Marketing &
12		Trading (EMT) Business Unit.
13	Q.	Please describe your duties and responsibilities in that position.
14	А.	I manage EMT's project development group, the department within EMT that
15		is responsible for the long-term analysis of gas supply, the long-term
16		contracting for physical natural gas transportation and storage capacity to
17		meet the needs of FPL's generation plants and the development of FPL's
18		long-term fuel price forecast.
19	Q.	Please describe your educational background and business experience.
20	А.	I earned a Bachelor of Arts degree from Edinboro State University in
21		Edinboro, Pennsylvania. For the last 20 years, my background has been in
22		project management and development of power plants and associated energy
23		facilities both in North America and internationally. Prior to joining FPL in

1		2007 and being appointed to my current position, I was	s employed by
2		Consumers Energy as Director of Development where I was	responsible for
3		the development of fossil power plant generation and early sta	age international
4		development. From 1996 to 2005, I was responsible for the	management of
5		development opportunities for DTE Energy Services, a	a non-regulated
6		subsidiary of DTE Energy.	
7	Q.	Are you sponsoring any exhibits?	
8	А.	Yes. I am sponsoring the following exhibits which are attack	hed to my direct
9		testimony:	
10		• RGS-1 Map of the Florida EnergySecure	Line Proposed
11		Corridor	
12		• RGS-2 Illustrative Map of the "Company	E" Upstream
13		Pipeline Project to be interconnected	with the Florida
14		EnergySecure Line	
15		• RGS-3 "Company E" Fact Sheet (Confidential))
16		• RGS-4 Report entitled "The Economic & 7	Fax Benefits of
17		FPL's Proposed Natural Gas Pipelin	e," prepared by
18		Fishkind & Associates, Inc. (Confidenti	ial)
19			
20		Please note that Exhibit RGS-1 is a map provided in accordan	ce with Rule 25-
21		22.091(2)(f), Florida Administrative Code, but the pipeline co	orridor is subject
22		to change through the regulatory siting process under t	he Natural Gas
23		Transmission Pipeline Siting Act (NGPSA).	

-

1

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

The purpose of my testimony is to support FPL's request that the Florida 2 Α. Public Service Commission ("FPSC" or the "Commission") grant an 3 affirmative determination of need for the Florida EnergySecure Line (the 4 "Project"), a 30-inch diameter intrastate pipeline originating near Florida Gas 5 6 Transmission, LLC (FGT) Compressor Station No. 16 in Bradford County, 7 Florida (FGT Station 16), and terminating at FPL's Martin Plant in Martin 8 County. The Florida EnergySecure Line will have an initial capacity of 600 9 million cubic feet per day (MMcf/d) and an in-service date of January 2014. 10 Specifically, I will: (1) summarize FPL's existing firm natural gas 11 transportation capacity; (2) describe the proposed Florida EnergySecure Line 12 being developed by FPL in conjunction with a new upstream interstate 13 pipeline (Upstream Pipeline), which will be owned and operated by a third 14 party natural gas transmission company (referred to as Company E for 15 confidentiality purposes) to deliver new natural gas transportation capacity to 16 FPL's highly efficient, lower-emission Cape Canaveral Next Generation 17 Clean Energy Center and the Riviera Beach Next Generation Clean Energy 18 Center (respectively, CCEC and RBEC; collectively, the Modernization 19 Projects); (3) outline the Florida EnergySecure Line's capability to increase its 20 capacity at a later time at very low cost; (4) describe the economic and tax 21 benefits the Florida EnergySecure Line brings to the community; and (5) 22 describe the adverse consequences of delaying or denying the need 23 determination of the Florida EnergySecure Line.

Please note that for purposes of my testimony one MMcf/d equals
 1,000 MMBtu/d, based on an assumed heat content of 1,000 Btu per cubic
 foot of natural gas.

4 Q. Please summarize your testimony.

The Florida EnergySecure Line, in concert with the Upstream Pipeline, 5 Α. captures a once-in-a-generation opportunity where there are sufficient and 6 immediate natural gas transportation needs (i.e., the Modernization Projects) 7 to economically justify construction of a new, geographically separate 8 pipeline into Florida. FPL continues to evaluate ways to increase renewable 9 generation cost-effectively, augment demand side management (DSM) and 10 expand its nuclear generating capability. Even with these efforts, however, 11 FPL will need additional clean-burning, natural gas-based generation in the 12 foreseeable future. 13

14

Currently, the natural gas infrastructure in Florida is unable to meet FPL's or 15 Florida's future firm natural gas transportation needs. The two major natural 16 gas providers, FGT and Gulfstream Natural Gas Systems, L.L.C. 17 18 (Gulfstream), while dependable suppliers for many years, no longer have sufficient firm capacity available on their systems, nor the ability to expand 19 their systems at a competitive cost. As it stands, neither FGT nor Gulfstream 20 possess the current operational capability to supply the increased firm 21 transportation volumes and increased delivery pressures for the modernized 22 CCEC and RBEC facilities, as these generating units require a more advanced 23

natural gas delivery system. To meet the new gas requirements, these incumbent pipeline companies would require substantial upgrades to their existing systems. Moreover, the current natural gas infrastructure in Florida relies on gas supplies originating from the Gulf Coast region, which is susceptible to supply disruptions due to severe weather events.

- 7 The Florida EnergySecure Line, in concert with the Upstream Pipeline, not 8 only meets the immediate needs of FPL's CCEC and RBEC facilities, it also 9 addresses many of the challenges that are inherent in the incumbent pipeline 10 systems in Florida by (1) obtaining a higher percentage of its supplies from 11 sources other than the Gulf of Mexico, i.e. Mid-Continent shale gas, 12 (2) having the capability of incrementally expanding its maximum capacity up 13 to 1.25 billion cubic feet per day (Bcf/d) at a low cost; and (3) increasing 14 pipeline competition within Florida.
- 15

1

2

3

4

5

6

16 If the need for the Florida EnergySecure Line is not approved, the numerous 17 benefits of the Project will not be realized. In particular, FPL and its 18 customers would be denied the opportunity to pursue the most long-term, 19 cost-effective solution of meeting FPL's natural gas needs while increasing 20 natural gas reliability and supply diversity in Florida.

FPL'S EXISTING NATURAL GAS

2

1

TRANSPORTATION CAPACITY

3

4 Q. Please summarize FPL's existing contractual firm natural gas 5 transportation rights.

6 Α. Currently, natural gas supplies are delivered into Florida by four interstate 7 pipeline systems: FGT's and Gulfstream's pipeline systems, Southern Natural 8 Gas Company's (SNG) Cypress Project and Gulf South Pipeline Company, 9 L.P. (Gulf South). As explained by FPL witness Sexton, however, the Cypress Pipeline only has direct deliveries to the Jacksonville market and 10 11 Gulf South only provides direct deliveries to the Pensacola market. By 12 contrast, the FGT and Gulfstream systems extend into various markets within 13 Florida and provide approximately 90% of the gas transportation capacity 14 available in the state. FPL currently holds firm contractual natural gas 15 transportation rights on both the FGT and Gulfstream systems, but not on 16 Cypress or Gulf South.

17

18 The FGT pipeline, which extends from southern Texas to Florida, is designed 19 to transport natural gas supplies received in Texas, Louisiana, Mississippi and 20 Alabama for delivery to markets within Florida. While FPL's pipeline 21 capacity rights on the FGT system vary slightly by season, FPL currently has 22 firm transportation agreements in place with FGT for a total of 874 MMcf/d 23 during the peak summer season. This represents approximately 40% of FGT's

design transportation capacity into Florida. In addition, FPL has executed a 1 precedent agreement with FGT to acquire 400 MMcf/d of additional capacity 2 on FGT's recently-announced Phase VIII expansion project. Thus, after 3 4 FGT's Phase VIII expansion project is placed in service in the spring of 2011, 5 FPL will hold a total of 1.274 Bcf/d of firm transportation capacity on the 6 FGT system during the peak summer demand season, representing approximately 42% of FGT's total transportation capacity into Florida. At 7 8 this capacity, sufficient natural gas can be provided on FGT's system to 9 generate electricity to serve approximately two million FPL customers.

10

11 The Gulfstream pipeline, which is designed to transport natural gas from 12 various receipt points in the Mobile Bay area, extends from Alabama, across 13 the Gulf of Mexico, to its terminus at FPL's West County Energy Center 14 (WCEC) in Palm Beach County, Florida. FPL currently holds 535 MMcf/d of 15 firm transportation capacity on Gulfstream. Further, per contractual 16 agreements, this quantity will rise to 695 MMcf/d beginning June 1, 2009, 17 when Gulfstream's Phase III expansion is completed, which will represent 18 approximately 56% of Gulfstream's design capacity. At this capacity, 19 sufficient natural gas can be provided on Gulfstream's system to generate 20 electricity to serve approximately one million FPL customers.

- Q. Is there a need to upgrade the natural gas pipeline infrastructure to meet
- 2

FPL's future natural gas transportation needs?

Yes. FPL continues to evaluate ways to increase use of renewable energy 3 Α. resources cost-effectively, including solar and wind resources, but base-load 4 natural gas generation is and, for the foreseeable future, will continue to be a 5 critical component of FPL's efforts to meet customer demands while 6 minimizing greenhouse gas emissions. In order for FPL to continue to meet 7 its natural gas requirements, FPL relies on its combined natural gas 8 transportation rights under contract with FGT and Gulfstream as valued 9 suppliers. However, the current FPL initiatives to install highly-efficient 10 clean natural gas generation at the CCEC and RBEC require expanded and 11 upgraded gas delivery systems beyond the capabilities of the existing and 12 proposed expansions of FGT's and Gulfstream's systems. By facilitating the 13 introduction of a third major natural gas pipeline into Florida, the proposed 14 Florida EnergySecure Line will provide a solution for diversity and reliability 15 of supply and for upgraded pressure and delivery capabilities. 16

17 Q. Are there other benefits associated with introduction of new pipeline 18 infrastructure into Florida?

A. Yes. The Florida EnergySecure Line should increase competition within the
 region. Projects similar to the Florida EnergySecure Line have created market
 dynamics that have significantly impacted the economics of the overall
 portfolio. As an example, FPL entered into a transportation agreement with
 the Southeast Supply Header (SESH) pipeline project, which began delivering

1		natural gas (sourced from on-shore production fields in Texas and Louisiana)
2		into FGT and Gulfstream beginning in September 2008. Once these deliveries
3		began, FGT and Gulfstream customers who purchased natural gas in the
4		Mobile Bay area experienced over a 50% drop in the overall basis premium
5		(current premium for Mobile Bay supplies above NYMEX Henry Hub). FPL
6		projects that this differential could result in customer savings in excess of
7		\$50 million in 2009 alone, essentially paying the annual fee for the SESH
8		pipeline. This is in addition to the many reliability and diversity benefits the
9		SESH pipeline brings to FPL's portfolio.
10		
11		DESCRIPTION OF THE
12		FLORIDA ENERGYSECURE LINE
12 13		FLORIDA ENERGYSECURE LINE
	Q.	FLORIDA ENERGYSECURE LINE Please describe the proposed Florida EnergySecure Line.
13	Q. A.	
13 14		Please describe the proposed Florida EnergySecure Line.
13 14 15		Please describe the proposed Florida EnergySecure Line. The Florida EnergySecure Line will be an intrastate pipeline located entirely
13 14 15 16		Please describe the proposed Florida EnergySecure Line. The Florida EnergySecure Line will be an intrastate pipeline located entirely within Florida. The initial facility, which will support commercial operation
13 14 15 16 17		Please describe the proposed Florida EnergySecure Line. The Florida EnergySecure Line will be an intrastate pipeline located entirely within Florida. The initial facility, which will support commercial operation of FPL's Modernization Projects, will consist of approximately 280 miles of
13 14 15 16 17 18		Please describe the proposed Florida EnergySecure Line. The Florida EnergySecure Line will be an intrastate pipeline located entirely within Florida. The initial facility, which will support commercial operation of FPL's Modernization Projects, will consist of approximately 280 miles of 30-inch mainline pipe, approximately 23 miles of 20 to 24-inch laterals, and
13 14 15 16 17 18 19		Please describe the proposed Florida EnergySecure Line. The Florida EnergySecure Line will be an intrastate pipeline located entirely within Florida. The initial facility, which will support commercial operation of FPL's Modernization Projects, will consist of approximately 280 miles of 30-inch mainline pipe, approximately 23 miles of 20 to 24-inch laterals, and two compressor stations. The proposed intrastate pipeline will be owned by

1 Q. What is the projected in-service date of the Florida EnergySecure Line?

The in-service date for the Florida EnergySecure Line is currently projected to 2 Α. be January 2014. As the Florida EnergySecure Pipeline will be placed in 3 service approximately six months after the CCEC's projected in-service date, 4 FPL will install natural gas boost compression at CCEC to ensure reliable gas 5 supply via FGT's existing pipeline system during the interim period. The 6 capital and operating costs of the CCEC boost compression have been 7 included in the economic evaluation discussed in the testimony of FPL 8 9 witness Enjamio.

10 Q. What customers will the Florida EnergySecure Line serve?

All gas delivered on the pipeline will be consumed within the state of Florida. 11 Α. Initially, the Florida EnergySecure Line will serve primarily the natural gas 12 transportation needs of FPL's Modernization Projects, with these facilities 13 requiring approximately 400 MMcf/d in total, or nearly two-thirds of the 14 pipeline's initial capacity. The remaining 200 MMcf/d will be delivered to 15 FPL's Martin Plant for reliability purposes, but will also be offered to other 16 entities within the state. The 200 MMcf/d delivered to FPL's Martin Plant can 17 displace deliveries from FGT or Gulfstream to that site, which can then be 18 redirected to other FPL facilities or to other entities within the state. 19

20

The pipeline will continue to serve FPL's customers as additional natural gas generation facilities are added to meet customer demand over the useful life of the Project, which is estimated to be in excess of 40 years. In the near term,

the Florida EnergySecure Line will be available to serve the needs of other 1 Florida customers through the sale of available transportation capacity. In 2 addition, any unused transportation capacity could be used to help meet 3 natural gas system reliability requirements during an unforeseen delivery 4 system interruption by back feeding gas through the potential southern Florida 5 hub interconnection with FGT and Gulfstream at the FPL Martin Plant as 6 described below. Interconnections to deliver gas to FGT and Gulfstream 7 would require blanket certificate approval from the Federal Energy 8 9 **Regulatory Commission (FERC).**

10 Q. Will sales of available transportation capacity to third parties benefit 11 FPL's customers?

A. Yes. FPL's customers will benefit from sales of all or a portion of the
remaining capacity to third parties because revenues from any such sales will
be credited to FPL's customers through the Fuel Cost Recovery Clause.

15 Q. Will the Florida EnergySecure Line be interconnected to other pipeline
16 facilities?

The proposed Florida EnergySecure Line will be able to connect to interstate 17 Α. pipelines at the northern and southern ends of the Project, allowing for an 18 integrated pipeline system in Florida. At the north end, the Florida 19 EnergySecure Line will interconnect with the Upstream Pipeline and 20 potentially with the existing FGT pipeline. In addition, there is the possibility 21 that the Florida EnergySecure Line could interconnect with SNG's Cypress 22 Project, creating the option to access liquefied natural gas (LNG) from the 23

Elba Island facility located in Savannah, Georgia. At the south end, the Florida EnergySecure Line could in the future interconnect with the FGT and Gulfstream pipelines at FPL's Martin Plant. Interconnecting the Florida EnergySecure Line with FGT, Gulfstream and the new Upstream Pipeline 4 would increase the operational flexibility of the entire natural gas system in 5 6 Florida.

- A map is attached to my testimony as Exhibit RGS-1, which shows the 8 proposed corridor of the Florida EnergySecure Line. As stated earlier, the 9 specific route of the Project is the subject of the NGPSA process administered 10 by the Florida Department of Environmental Protection (DEP). FPL will be 11 engaging regulatory agencies and the public for input on this preliminary 12 proposed corridor in advance of filing an NGPSA application. 13
- 14

1

2

3

7

As a point of clarification, the Florida EnergySecure Line will not connect to 15 the Gulf South pipeline because it only reaches into the far western edge of 16 the Florida panhandle and does not provide connection to a viable receipt 17 18 point for FPL.

19 Please provide a general description of the proposed location, from Q. origination to terminus, of the Florida EnergySecure Line. 20

The mainline of the Florida EnergySecure Line will be located entirely within 21 Α. Florida, commencing at a point near FGT Station 16 in Bradford County, 22 Florida. Commencement of the new pipeline at this location will create a 23

northern Florida receipt hub or interconnection point for the proposed 1 Upstream Pipeline, the existing FGT pipeline, the Florida EnergySecure Line 2 and, potentially, the Cypress Pipeline. This new north Florida hub will 3 enhance the reliability of natural gas supplies, as well as increase pipeline-to-4 pipeline supply competition. During normal operations, natural gas will flow 5 south from the area of Transcontinental Gas Pipe Line's (Transco) Station 85 6 via the Upstream Pipeline into Florida and connect with the new Florida 7 EnergySecure Line for delivery to FPL and other Florida customers. During 8 times when natural gas supply or gas transportation may be interrupted into 9 the state of Florida, interconnections between the Upstream Pipeline, FGT and 10 Florida EnergySecure Line near FGT Station 16 would permit operational 11 flexibility to potentially deliver and/or receive natural gas to supply FPL's 12 plants and other customers based on the specifics of the supply and demand 13 14 requirements.

15

16 From the vicinity of FGT Station 16, the mainline will extend southeast to FPL's Martin Plant where, with FERC approval, it could be interconnected 17 with the existing Gulfstream and FGT pipelines to create a southern Florida 18 natural gas pipeline hub. This interconnectivity would allow for an increased 19 collective reliability of the flow of clean natural gas fuel for energy facilities 20 and customers in south Florida. Should an unforeseen supply or system 21 22 interruption occur, fuel flow could be managed through reallocation or 23 redirection of natural gas supplies.

Beginning at the Martin Plant, FPL will utilize an existing high pressure 1 natural gas/oil pipeline that extends southeast to FPL's existing 45th Street 2 Terminal located at 2400 Port West Boulevard in the City of Riviera Beach in 3 Palm Beach County. Utilizing this existing 36-mile section of oil/gas pipeline 4 will eliminate the need for new construction between these two points and 5 thereby minimize environmental impacts in this sensitive and populous area. 6 The existing oil/gas pipeline, which has already been permitted, is not part of 7 8 FPL's need determination request.

9

As part of the Project, FPL will construct a 17-mile lateral pipeline to the CCEC, as well as a new 3-mile lateral from the 45th Street Terminal to the RBEC. Additionally, FPL will install permanent compression at the 45th Street Terminal and will upgrade an existing 3-mile natural gas-only lateral that connects the 45th Street Terminal to the FGT pipeline system. Additional laterals may be added at a later date to serve future generation facilities or customers.

17 Q. Has FPL identified a proposed corridor for the Florida EnergySecure 18 Line?

A. Yes. The proposed corridor would co-locate, where possible, in FPL's existing 230kV and 500kV transmission corridors or other existing utility corridors. As proposed, approximately 250 miles of mainline pipeline and laterals would be co-located with FPL's existing transmission corridor and/or

1

2

4

5

6

7

other utility rights-of-way, minimizing the Project's impact as compared to a new green field pipeline.

3

The final location of the Florida EnergySecure Line corridor, however, is subject to the outcome of the regulatory process administered by the DEP and ultimately decided by the Governor and Cabinet sitting as the Natural Gas Transmission Pipeline Siting Board.

8 Q. Are there any proposed alternate corridors currently being considered
9 for the Florida EnergySecure Line?

There are no proposed alternate corridors at this time. However, as part of the 10 Α. NGPSA process FPL will solicit input on the proposed corridor and will 11 evaluate this input as part of a comprehensive analysis of alternative corridors. 12 Through the NGPSA stakeholder engagement and outreach process, including 13 open houses, FPL is seeking input from regulatory agencies and the public on 14 the results of our preliminary recommendation. From the results of this 15 process, FPL will identify a preferred corridor and any alternate corridors in 16 17 our NGPSA application.

18 Q. How did FPL determine the appropriate size and initial capacity of the
 19 Florida EnergySecure Line?

A. FPL conducted an in-depth evaluation of pipeline design alternatives to select
 an optimum pipeline system: (1) to meet FPL's current transportation capacity
 requirements for the Modernization Projects; (2) to economically increase
 capacity over time through the addition of compression, as additional natural-

gas fired generation is needed; and (3) to minimize the cost and impact on FPL's customers. Based on FPL's evaluation, the 30-inch Florida EnergySecure Line with its initial capacity of 600 MMcf/d meets the 400 MMcf/d pipeline capacity needs of the Modernization Projects while optimizing the initial capital cost and variable cost of operation of the pipeline. Furthermore, as discussed by FPL witness Stubblefield, based on discussions with respondents to FPL's solicitation, 600 MMcf/d is the minimum quantity necessary for suppliers to commit to build a new interstate pipeline into Florida.

10

1

2

3

4

5

6

7

8

9

11 The selection of a 30-inch pipeline diameter for the Florida EnergySecure 12 Line was based on a cost-benefit analysis of larger and smaller diameter 13 piping systems. A pipeline with a smaller diameter than 30 inches (e.g., 24inches) would be close to full effective capacity at flows of 400 to 600 14 15 MMcf/d, just enough for the Modernization Projects. Although compression could be added to a smaller pipeline, variable operating costs are significantly 16 17 higher and are considered an economic operations penalty, limiting capacity 18 growth and flexibility. FPL also evaluated a larger diameter piping system to 19 consider even larger economies of scale. Given the current load growth projections, however, the period of time to fully utilize this larger system's 20 21 initial capacity is too uncertain and the burden on customers potentially too 22 high.

FUTURE PIPELINE EXPANDABILITY

2

3

1

Q. Can the Florida EnergySecure Line be expanded at a later date?

4 A. Yes. A 30-inch pipeline can transport approximately 600 MMcf/d with 5 approximately 20,000 horsepower (HP) of compression. Pipeline transportation capacity can be increased in nominal increments of 200 6 7 MMcf/d through the addition of approximately 18,000 HP of compression for 8 each expansion, to a maximum capacity of 1.25 Bcf/d. By comparison, 9 incumbent pipeline companies could not add such capacity without either 10 (1) installing new pipe, or (2) if feasible, adding compression that would have 11 considerably higher variable operating costs than the Florida EnergySecure 12 Line.

13

Because only additional compression would be needed to add capacity to the 14 Florida EnergySecure Line, incremental expansions of this Project are much 15 more cost-effective than installing new pipeline infrastructure to provide 16 17 additional capacity at a later date. The economies of scale result from the 18 relatively low additional cost of capital to install each incremental 19 compression expansion. The initial Florida EnergySecure Line cost of 20 \$1.588 billion includes all required facilities to interconnect and deliver 600 MMcf/d of natural gas. Each incremental expansion requires only the 21 22 compression necessary to flow an additional 200 MMcf/d, plus interconnection costs at a new location. Contingent on the specifics of the 23

additional compression, including year of installation and related costs, the location and other remaining details of the installation, we currently estimate costs varying between \$125 million to approximately \$200 million for each upgrade. Thus, an initial 200 MMcf/d expansion at a cost of \$125 million would represent a 33% increase in capacity (600 MMcf/d to 800 MMcf/d) for an increased investment of slightly less than 8%.

DESCRIPTION OF THE COMPANY E

UPSTREAM INTERSTATE PIPELINE

10

7

8

9

11 Q. Please describe Company E's proposed Upstream Pipeline.

A. The Upstream Pipeline will be a new interstate pipeline originating from an
interconnection with Transcontinental Gas Pipe Line at Transco Station 85,
located in Choctaw County, Alabama, and terminating at the point of
interconnection with the Florida EnergySecure Line near FGT Station 16, in
Bradford County, Florida. An illustrative map showing the general location
of the Upstream Pipeline Project is attached as Exhibit RGS-2 to my
testimony.

19 Q. Who will own and operate the Upstream Pipeline?

A. The Upstream Pipeline will be owned and operated by a major natural gas
 transmission company identified as Company E for confidentiality purposes.
 Confidential Exhibit RGS-3 provides a description of the company and its
 experience with natural gas pipelines. Company E is a large, financially

- 1 strong, experienced provider, owner and operator of natural gas pipelines with 2 a solid track record of pipeline development, construction and operations. 3 Will the construction of the Upstream Pipeline require regulatory 0. 4 approval? 5 Yes. The Upstream Pipeline will require federal certification by FERC A. pursuant to the provisions of the Natural Gas Act (NGA). Company E 6 7 currently plans to file its application for a certificate of public convenience and necessity with FERC in the fall of 2011 on schedule to meet the required 8 9 January 2014 in-service date. The Upstream Pipeline is not a part of this need 10 application before the FPSC. Is the Upstream Pipeline expected to be the primary supply source for the 11 0. 12 Florida EnergySecure Line? 13 A. The Upstream Pipeline will be the primary link in the upstream Yes. 14 transportation of the Florida EnergySecure Line's gas and will transport
- nearly all of the volumes reaching the Project. In addition, by potentially
 creating a northern Florida interconnection, it will be possible to access gas
 supply from FGT or Cypress as market conditions and physical delivery
 capabilities warrant.

19 Q. What is expected to be the supply source for the Upstream Pipeline?

A. As described in more detail by FPL witness Sexton, the Upstream Pipeline
will be interconnected with the facilities of other interstate pipeline companies
at Transco Station 85, including Transco, Boardwalk Pipeline Partners, L.P.,
Gulf Crossing Pipeline, and Kinder Morgan's Midcontinent Express Pipeline.

e other
Florida
inating
ands in
na, the
orthern
ncrease
Secure
ind &
ate the
of the
ociates
y level
ovided
kind &
sulting

1 from the installation of the Project, and (ii) over 7,600 total direct and indirect 2 jobs through the multiplier effect of direct spending from wages and output 3 during construction of the Florida EnergySecure Line. Fishkind & Associates 4 also estimates that construction of the pipeline will generate approximately 5 \$20 million in Florida sales and use tax and contribute over \$400 million in 6 tax benefits to local governments over the projected 40 year useful life of the 7 Project. In total, through the indirect effects of direct spending from wages 8 and output during construction, the pipeline's installation is estimated to 9 generate an overall economic impact of \$1.2 billion. 10 11 ADVERSE CONSEQUENCES OF DELAY OR DENIAL 12 13 Q. In the event that a determination of need for the Florida EnergySecure 14 Line is denied or significantly delayed, what consequences do you 15 foresee? 16 Α. If this Project is not approved or is significantly delayed, alternative means of 17 natural gas delivery system upgrades will be required to provide the additional 18 natural gas deliveries at the upgraded pressures required to serve FPL's 19 Modernization Projects and future gas transportation needs. In the short term, 20 installation of on-site compression combined with reallocation of FPL's 21 existing gas delivery rights would permit operation of the Modernization 22 Projects, but only on a sub-optimal basis. Recognizing that this can only be a 23 short-term solution, FPL must employ other more permanent alternatives to

address FPL's long-term natural gas transportation needs. As there are changes in any of a number of underlying factors, including load growth, technology, or operation of the existing FPL generation units, FPL will need to secure additional natural gas delivery capacity. Failure to upgrade both the volume and pressure would directly impact both the reliability and cost to operate the current FPL generation facilities and the ability to expand natural gas generation in the future as required.

8

1

2

3

4

5

6

7

9 Further, expansion of one of the incumbent pipeline delivery systems (FGT or 10 Gulfstream), which were alternatives considered in the evaluation of this 11 Project, would make adding a new physical pipeline into Florida economically infeasible for many years to come and fail to take advantage of a unique 12 13 opportunity to strengthen the natural gas infrastructure in the state. As FPL 14 witness Stubblefield explains, results of the competitive solicitation for a third major pipeline into Florida indicated a 600 MMcf/d capacity as the minimum 15 16 size to attract proposals for a new pipeline.

17

Expansion of one of the incumbent systems would not provide the economic, reliability and security benefits of a third pipeline. As FPL witness Sexton explains, FPL's load concentration on the two incumbent pipelines is unprecedented in North America. FPL currently produces more gigawatt hours of electricity from natural gas than the next four utilities combined. A key consideration for this Project is not that the current systems have been

anything other than reliable, but rather upgrading and expanding the physical 1 pipeline infrastructure and gas supply diversity are essential. Furthermore, the 2 Florida EnergySecure Line is a \$1.588 billion project, the construction of 3 which will provide a significant immediate and on-going boost to Florida's 4 economy. As discussed above, this large infrastructure investment also will 5 provide significant tax benefits to state and local governments. The loss of 6 revenues into the state of Florida realized by cancelling the Project's proposed 7 expenditures on labor and materials would be substantial. Failing to approve 8 the Project would deprive the state of various economic benefits at a time 9 when both the state and country most need new economic boosts and job 10 creating opportunities. 11

- 12 Q. Does this conclude your testimony?
- 13 A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition to determine need for Florida) EnergySecure Pipeline by) Florida Power & Light Company)

Docket No: 090172-EI Served: July 24, 2009

ERRATA SHEET

LINE #

20

DIRECT TESTIMONY OF ROBERT G. SHARRA

PAGE

17

Replace "\$1.588" with "\$1.531"

CORRECTION

Respectfully submitted this 24th day of July, 2009.

R. Wade Litchfield, Vice President and Associate General Counsel John T. Butler, Senior Attorney Florida Power & Light Company 700 Universe Boulevard Juno Beach, FL 33408 Telephone: (561) 304-5253 Facsimile: (561) 691-7135

and

HOPPING GREEN & SAMS, P.A.

By:

1

E. Luns

Gary V. Perko Brooke E. Lewis 123 S. Calhoun Street (32301) P.O. Box 6526 (32314) Tallahassee, Florida 850-222-7500 Fax: 850-224-8551

Attorneys for Florida Power & Light Company

07584 JUL 24 8 FPSC-COMMISSION CLERK 1

2

4

BY MR. PERKO:

Mr. Sharra, could you please provide your 0. 3 summary of your testimony?

> I would like to. Thank you. Α.

5 Good morning, Chairman Carter and Thank you for the opportunity to address 6 Commissioners. 7 you today.

The purpose of my testimony is to support 8 FPL's request that the Commission grant an affirmative 9 determination of need for the proposed Florida 10 EnergySecure line, a unique and important project to 11 initially serve the natural gas transportation 12 requirements of FPL's modernizations at the Cape 13 14 Canaveral Clean Energy Center and the Riviera Beach Clean Energy Center. I would also like to focus on key 15 components of the project and explain the benefits to 16 17 FPL's customers in the state.

18 The Florida EnergySecure line is a new intrastate pipeline to be located entirely within 19 Florida commencing in Bradford County and extending 20 southeast to its terminus at FPL's Martin plant. 21 The initial facility will consist of approximately 280 miles 22 23 of mainline pipe, approximately 23 miles of laterals and 24 two compressor stations.

25

The modernizations are replacing 1960s era oil

and gas fueled steam units. The current natural gas 1 delivery systems were not designed to serve the 2 increased natural gas pressures or flows required by 3 today's highly efficient gas turbine technology. 4 Neither of the two incumbents, either FGT or Gulfstream, 5 currently serving FPL plants have the capacity nor the 6 facilities to meet these increased delivery requirements 7 without a major capital upgrade and expansions of their 8 systems. Therefore, a do-nothing scenario is not an 9 10 option.

With the modernizations coming into service in 11 2013 and 2014, an additional 400 million cubic feet per 12 day of firm pipeline capacity is required. Moreover, it 13 is FPL's expectation that a significant portion of 14 future generation expansions will also be required, 15 which will require -- I'm sorry -- which will also be 16 17 fueled by natural gas, which will require even greater 18 transport, transport capacity.

Depending upon the pace of the economic recovery and the progress of identified nuclear plant additions, additional transport capacity could be required as early as 2018.

The Riviera Beach modernization will be served by an existing high pressure oil, natural gas pipeline owned and operated by FPL that currently connects the

Martin plant with FPL's 45th Street terminal. By utilizing that existing pipeline segment, FPL will avoid the need to build over 36 miles of new pipeline through environmentally sensitive areas in western Palm Beach County. Further, collocating the EnergySecure line in the existing transmission rights-of-ways minimizes impact on the environment and minimizes impact to residents in proximity to the pipeline route.

1

2

3

4

5

6

7

8

22

23

24

25

9 The Florida EnergySecure line presents a 10 unique opportunity to anchor a new geographically 11 separate third pipeline into Florida, improving the 12 physical reliability and security of the gas transport 13 system.

In recent history it has been the significant 14 gas transportation requirements of FPL that have 15 anchored the expansions of the two incumbent pipeline 16 systems that currently provide essentially all of FP&L's 17 natural gas transport capacity and provide a significant 18 portion of the gas transport capacity for the balance of 19 This time, however, we believe FPL has a 20 the state. better solution for FPL's customers and the state. 21

FPL's solution, the Florida EnergySecure line as a third major pipeline into peninsular Florida, eases the supply concentration on the two incumbent pipelines of approximately 2 billion cubic feet per day. Such

FLORIDA PUBLIC SERVICE COMMISSION

load concentration is unprecedented in the North American electric utility industry. By April 2011 when the latest expansion of the FGT system comes online, the majority of FPL's 4.5 million customers will receive electricity generated from gas delivered through just these two incumbent pipelines.

7 In addition, this project will access 8 additional natural gas receipt points, creating much 9 needed competition for gas suppliers and bring increased 10 market competition dynamics into play. A broad 11 portfolio of gas suppliers over a geographically diverse 12 area reduces the risk of interruption of supply or 13 delivery from any one production area.

Finally, FPL has the proven experience to successfully manage and execute complex schedule and budget driven energy projects to make the Florida EnergySecure line a reality and to bring the benefits this pipeline represents to the customers of FPL and the State of Florida.

20

25

1

2

3

4

5

6

Thank you.

21 MR. PERKO: I'm sorry. Mr. Chairman, it 22 occurred to me that we have some confidential exhibits 23 for Mr. Sharra, which we can distribute in the red 24 folders at this time, if that would be your pleasure.

CHAIRMAN CARTER: Mr. Self, what do you think

FLORIDA PUBLIC SERVICE COMMISSION

would be most convenient in how we do that? Are you 1 2 going to --MR. SELF: I'm not going to ask him about 3 those, so I don't need them at this time. 4 MR. PERKO: That's fine. 5 CHAIRMAN CARTER: Okay. Hang on one second. 6 Commissioner Skop? 7 COMMISSIONER SKOP: Thank you, Mr. Chair. 8 Mr. Self, also the prior confidential exhibit, 9 are you going to use that one, or can we give those back 10 11 to you? MR. SELF: Yes, we meant -- we'll get those at 12 13 the break from you. Thank you. CHAIRMAN CARTER: Okay. Thank you. 14 15 Mr. Self, you may proceed. MR. SELF: Thank you. 16 CROSS EXAMINATION 17 BY MR. SELF: 18 Good morning, Mr. Sharra. I'm Floyd Self, 19 Q. 20 representing FGT. Good morning. 21 Α. 22 In your summary you said that there was the Q. potential for new capacity being needed in 2018. Do you 23 24 recall that statement? 25 Yes, sir, I do. A. FLORIDA PUBLIC SERVICE COMMISSION

Are you talking about new gas generating plant 1 Q. that would come on in 2018? 2 Yes, sir, I am. The reference is related to 3 Α. 4 the nuclear delay case. Okay. But at this point in time your Ten-Year 5 Q. Site Plan, for example, does not show a plant coming 6 online in 2018; correct? 7 That is correct. Α. 8 MR. SELF: Okay. Thank you very much. 9 10 No further questions, Mr. Chairman. CHAIRMAN CARTER: Thank you, Mr. Self. 11 Commissioners, I'm going to -- I'll go to 12 staff. 13 Staff, you're recognized. 14 MS. BROWN: Excuse me, Mr. Chairman. 15 CROSS EXAMINATION 16 17 BY MS. BROWN: 18 Q. Hi, Mr. Sharra. Good morning. 19 A. I just have a very few sort of cleanup 20 Q. 21 questions for you. CHAIRMAN CARTER: Martha, pull your mike --22 get a little closer to your mike. There we go. 23 24 BY MS. BROWN: I just have a very few cleanup questions for 25 Q. FLORIDA PUBLIC SERVICE COMMISSION

1 you. CHAIRMAN CARTER: Thank you. 2 BY MS. BROWN: 3 You just mentioned that there will be Q. 4 additional receipt points for the delivery of natural 5 gas with respect to the upstream pipeline and the б EnergySecure pipeline; is that correct? 7 Yes, ma'am. 8 Α. Other than the delivery point for the Riviera 9 0. 10 Beach and Cape Canaveral plant, are there any other 11 delivery points projected to be constructed as part of 12 the EnergySecure line? 13 Α. The EnergySecure line will have three connection points as originally designed: The Cape 14 15 Canaveral Clean Energy Center, the Riviera Beach Clean 16 Energy Center, as you've referenced, and the Martin 17 plant, the FPL Martin plant. 18 Q. And that's it? 19 Initially those three delivery points are what Α. 20 have been identified. 21 Q. Okay. Thank you. 22 Now we asked Mr. Forrest about earning a rate 23 of return on the transportation of natural gas through 24 the pipeline, that this would be the first time for FP&L 25 to earn a rate of return on the transport -- on the FLORIDA PUBLIC SERVICE COMMISSION

1 2

3

4

5

6

25

A. Yes, ma'am.

Q. And then I think on redirect Mr. Forrest said whether or not FPL or some other pipeline owns the pipeline, the ratepayer would be charged a rate of return for the transportation of natural gas; correct?

transportation of natural gas; is that correct?

A. Yes, ma'am. My understanding is that if we
purchase natural gas transportation services from a
third party, for example, FGT or Gulfstream, that in the
sale price or the demand charge, if you will, of that is
embedded all the costs of running the business,
including a return of and on capital.

13 Q. So really ratepayers should be indifferent to 14 who owns the pipeline, as long as they are paying fair 15 market price; correct?

16 A. I would think the logic of that would be17 correct.

Q. If FPL owns the pipeline though, the company
will benefit from the rate of return it will earn on its
investment, where if some other company owned the
pipeline, the associated costs would simply be passed
through to ratepayers and FPL would not have the
opportunity to earn a profit; correct?
A. I believe that's an accurate statement.

A. I believe that's an accurate statement.MS. BROWN: May we just have one minute?

1	CHAIRMAN CARTER: Okay. Let's just take a
2	minute. We won't leave. Just everybody hold your
3	places.
4	(Pause.)
5	BY MS. BROWN:
6	Q. Mr. Sharra, let me ask you a question about
7	FERC regulated pipelines. Are they put at risk if the
8	line is not fully subscribed?
9	A. I am not I would not propose that I would
10	be an expert in FERC regulated pipelines and that
11	business. But my understanding would be that they, that
12	there, there are two types of negotiations that go on on
13	FERC regulated pipelines. One would be a negotiated
14	rate with shippers and the other is a recourse rate.
15	And my understanding is that if a, if a pipeline fails
16	to fully subscribe the pipeline, it is at risk.
17	Q. Thank you. Now two, two oddball questions
18	that were punted to you.
19	Based on FPL's proposed accounting treatment,
20	will FPL begin to accrue AFUDC on costs incurred
21	beginning January 1, 2010?
22	A. Yes, ma'am. I would like to reference some
23	notes I have, as I'm not by any means an expert in
24	utility accounting. But it is my understanding that
25	there is a proposed adjustment in a rate case to move
	FLORIDA PUBLIC SERVICE COMMISSION

the pipeline cost out of Account 183 and move it into a 1 construction work in process, or a CWIP account. This 2 would allow FPL to accrue AFUDC from January 1st, 2010, 3 through the in-service date, which is projected to be 4 January 1st, 2014. 5 So then my understanding is that FP&L has 6 **Q**. included costs related to the EnergySecure line in its 7 8 rate case filing. No, ma'am. That's not my understanding. And 9 Α. subject to clarification, it's my understanding there 10 are no pipeline costs included in FPL's rate case. 11 But there is a proposal to move the cost out 12 0. of Account 183 and put it in CWIP? 13 14 Α. That is my understanding. Okay. All right. Will FP&L continue to 15 Q. accrue AFUDC until the EnergySecure line is placed in 16 service in 2014? 17 Yes, ma'am. That is my understanding. 18 Α. 19 Q. Okay. Subject to further clarification. 20 Α. MS. BROWN: All right. That's all the 21 22 questions we have. Thank you. CHAIRMAN CARTER: Commissioner Skop, you're 23 24 recognized. COMMISSIONER SKOP: Thank you, Mr. Chair. 25 FLORIDA PUBLIC SERVICE COMMISSION

Good morning, Mr. Sharra. 1 THE WITNESS: Good morning. 2 COMMISSIONER SKOP: If I could ask you to turn 3 to your Exhibit RGS-1, please. 4 THE WITNESS: Bear with me one second, please. 5 COMMISSIONER SKOP: And I think that shows the 6 big map behind you, although my eyes are not what they 7 8 were, once were. THE WITNESS: Yes, sir. 9 COMMISSIONER SKOP: I just want to understand. 10 I thought this was a useful graphic, but -- because it 11 answers some of the questions that I would have 12 13 otherwise asked you. But am I correct to understand that following 14 the intrastate pipeline down from the FGT Station 16 to 15 the lateral, the first lateral that you get to is what 16 connects to the Canaveral facility; is that correct? 17 THE WITNESS: Yes, sir. Is this working now? 18 COMMISSIONER SKOP: Yes. 19 THE WITNESS: Yes, sir. That is correct. 20 COMMISSIONER SKOP: Okay. And then following 21 the green dotted line down, you come to the Martin plant 22 where the gold line shows the existing FPL gas/oil 23 pipeline; is that correct? 24 THE WITNESS: Yes, Commissioner. The proposed 25

FLORIDA PUBLIC SERVICE COMMISSION

Florida EnergySecure line would terminate at the Martin plant and would interconnect with, as you say, the gold line, which is the 18-inch 36-mile segment which goes 3 from the Martin plant to the FPL 45th Street terminal. COMMISSIONER SKOP: Okay. And then there 5 would be one additional lateral from the 45th Street 6 terminal over to the Riviera Beach plant; is that 7

1

2

4

8

correct?

THE WITNESS: Yes, sir. Yes, Commissioner. 9 There would actually be two laterals. There would be a 10 three-mile lateral running from the 45th Street terminal 11 into the Riviera Beach Clean Energy Center. We would 12 also propose to construct a second lateral that would 13 run from the 45th Street terminal back to the FGT 14 15 mainline at the turnpike.

COMMISSIONER SKOP: Thank you. And with 16 respect to the existing gas/oil line, I guess 17 Mr. Forrest did defer to you on this, and it was the 18 subject of a staff question, but on staff's 19 Interrogatory Number 157 the question was posed, "Is FPL 20 aware of any investor-owned electric utility that has a 21 22 minimum of 100 miles of contiguous interstate -- or 23 intrastate pipeline facilities included in its base rate for which it earns an overall rate of return, and, if 24 25 so, please provide the details." And it has a response.

But what I'm concerned about is the existing 1 gas/oil line from the Martin plant to the 45th Street 2 terminal. And I guess what I was wondering is are 3 those -- obviously a capital investment was made for 4 that, that line, and is that encompassed to your 5 knowledge within existing base rates? 6 THE WITNESS: I am not able to address that 7 question. I know Mr. Forrest did direct the, the 8 question my way. I would believe that Witness Morley 9 may be better prepared to answer that. 10 COMMISSIONER SKOP: Okay. Well, I quess it 11 would seem to me to be somewhat important to the extent 12 that Mr. Self in his opening statement suggested that 13 there was precedent value that attached to the fact that 14 this had never been done before. And what I'm trying to 15 establish is whether in fact this existing 36-mile 16 pipeline obviously has to be recovered in costs 17 somewhere. I would assume it would be base rates, given 18 the, probably the time it was put into service as 19 opposed to a clause. But it would be interesting to 20 track that down. So I'll defer to, to that witness. 21 THE WITNESS: Thank you. 22 COMMISSIONER SKOP: I guess -- let me see if I 23 24 have any additional questions. The one additional question I did have, and 25 FLORIDA PUBLIC SERVICE COMMISSION

this was somewhat of a point of confusion from a 1 question that I heard our staff ask, and I just want to 2 clarify. If I heard your prior response correctly, that 3 consumers would be indifferent as to who actually owned 4 the pipeline, whether it be Gulfstream, FGT, or FPL, to 5 the extent that if a third party owns the pipeline, 6 their return on equity is actually embedded in the 7 demand charges that the utility has to pay and is passed 8 through to the consumers; is that correct? 9

10 THE WITNESS: I believe that would be correct,
11 yes, Commissioner.

12 **COMMISSIONER SKOP:** Okay. So if FPL were 13 granted need and built the pipeline and earned a return 14 on investment on the pipeline, that would be analogous 15 to exactly what's happening with the third-party 16 pipelines, it's just -- but their ROE is embedded, 17 whereas yours is more transparent; is that correct?

18 **THE WITNESS:** I believe that's the case. I 19 believe where the difference would come and where the 20 customers of FPL in the State of Florida would not be 21 indifferent (phonetic) is when the next expansion would 22 come, because I believe, as Witness Forrest had 23 described in great detail, the benefits of being able to 24 expand the 30-inch line.

25

COMMISSIONER SKOP: Okay. And not to have

that -- if I understand the testimony, and I'll let that 1 speak for itself and the witnesses, but it seems to me 2 that FPL is asserting that those future expansions would 3 be borne at a much lower cost than is typically incurred 4 by the third-party providers today; is that correct? 5 THE WITNESS: That is my understanding, yes, 6 7 Commissioner. COMMISSIONER SKOP: Okay. All right. And 8 then I guess one final question, with respect to the 9 embedded ROE that the third-party providers, you know, 10 recover in what they charge FPL, is FPL aware of, of 11 what that embedded ROE might be to the extent that --12 would FPL's existing ROE be lower than what is currently 13 recovered through a third-party pipeline provider? 14 **THE WITNESS:** I am not personally familiar 15 with the ROE that would be embedded either in the FGT or 16 any other interstate pipeline company. 17 COMMISSIONER SKOP: Okay. All right. Thank 18 19 you. Actually one follow-up question. On the 20 interstate pipeline companies, those are traditionally 21 regulated by FERC; is that correct? 22 23 **THE WITNESS:** Interstate pipeline companies are traditionally regulated by FERC. Yes, sir. 24 COMMISSIONER SKOP: Okay. And generally 25

FLORIDA PUBLIC SERVICE COMMISSION

speaking, in terms of -- well, I won't go there. I'll 1 just try and find the answer a different way. Thank 2 3 you. CHAIRMAN CARTER: Thank you, Commissioner. 4 Commissioners, anything further from the 5 bench? 6 Okay. Mr. Perko. 7 MR. PERKO: No redirect. 8 CHAIRMAN CARTER: Okay. Exhibits. 9 MR. PERKO: Commissioner, at this time -- or, 10 Mr. Chairman, at this time we would introduce FPL 11 Exhibits 6, 7, 8 and 9 into the record. 12 CHAIRMAN CARTER: Mr. Self? 13 14 MR. SELF: No objections. CHAIRMAN CARTER: Without objection, show it 15done. Exhibits 6, 7, 8 and 9. 16 (Exhibits 6, 7, 8 and 9 admitted into the 17 18 record.) And I presume this witness will also be coming 19 20 back for rebuttal? 21 MR. PERKO: That's correct. CHAIRMAN CARTER: So you'll be on recess. 22 COMMISSIONER SKOP: Mr. Chair? 23 CHAIRMAN CARTER: Commissioner Skop. 24 COMMISSIONER SKOP: Thank you, Mr. Chair. 25

I don't want to go into the rebuttal testimony, but I do want to ask two additional questions, I'm sorry, that I -- actually, hold on. There's a lot of paper in front of me this morning, so I apologize.

Mr. Sexton (sic.), I guess in your rebuttal 6 testimony you get into some additional analysis that 7 you've done. But generally speaking, it seems that 8 you've compared using the existing fuel forecast along 9 with what various scenarios A, B, and C in terms of 10 cases that FPL might do with the existing or excess 11 capacity on the proposed pipeline; is that correct? Ι 12 want to make sure I've got the right witness, but I 13 14 believe I do.

THE WITNESS: You may be referring to Witness
Sexton, who is looking at upstream receipt points,
deliverability, although I did --

18 **COMMISSIONER SKOP:** I'm sorry. I'm looking at 19 S and getting very confused. So I apologize. I 20 probably have like 3,000 pieces of paper in front of me. 21 So my apologies, and I'll reserve that for Mr. Sexton.

Generally speaking though on one final question, with respect to FERC regulating interstate pipelines, I think the analogy -- and feel free to answer if you're able to -- but historically FERC has

been very liberal with ROEs granted to interstate 1 pipelines or interstate transmission; is that your 2 3 general understanding? THE WITNESS: I'm afraid I can't address that 4 5 topic. COMMISSIONER SKOP: All right. Thank you. 6 CHAIRMAN CARTER: Thank you. 7 Commissioners, anything further for this 8 9 witness? 10 Okay. You're on recess. You may call your next witness. 11 And to the parties, just be advised of the 12 time constraints that I've put in, because we do want to 13 allow you an opportunity to take a break, as well as the 14 Commissioners to take a break and our staff to get a 1516 break and come back in. 17 You may proceed. MR. GOORLAND: Good morning, Mr. Chairman and 18 Commissioners. Scott Goorland for Florida Power & 19 Light. FPL calls Dr. Rosemary Morley. 20 And while, while she's setting up, I'll note 21 22 that Ms. Morley was not one of the folks in the room 23 this morning who was sworn in. CHAIRMAN CARTER: Okay. So I'll need to swear 24 25 Ms. Morley in.

FLORIDA PUBLIC SERVICE COMMISSION

And, Ms. Morley, before I swear you in -- Dr. 1 Morley, before I swear you in, I've got to let you know 2 that they've deferred a lot of stuff to you. They said 3 you're the witness, you're the witness. So would you 4 please stand and raise your right hand? 5 (Witness sworn.) 6 Please be seated. 7 You may proceed. 8 ROSEMARY MORLEY 9 was called as a witness on behalf of Florida Power & 10 Light Company and, having been duly sworn, testified as 11 12 follows: DIRECT EXAMINATION 13 Dr. Morley, would you please state your name 14 Q. 15 and business address. Rosemary Morley, 700 Universe Boulevard, Juno Α. 16 17 Beach, Florida. And by whom are you employed and in what 18 Q. 19 capacity? I'm employed by Florida Power & Light as the 20 Α. 21 Director of Load Forecasting. And have you prepared and caused to be filed 22 Q. 28 pages of prefiled direct testimony in this 23 24 proceeding? 25 Α. Yes, I have. FLORIDA PUBLIC SERVICE COMMISSION

And did you also cause to be filed errata to 1 Q. your testimony on July 24th, 2008? 2 Yes, I did. Α. 3 And do you have any further changes or Q. 4 revisions to your prefiled direct testimony? 5 No, I do not. 6 Α. And with those changes, if I asked you the 7 ο. same questions contained in your direct testimony, would 8 your answers be the same? 9 Yes, they would. 10 Α. And are you also sponsoring any exhibits to 11 Q. 12 your direct testimony? 13 Yes, I am. A. And do those exhibits consist of 21 pages 14 Q. shown as RM-1 through RM-21, also identified as staff's 15 exhibit s, on staff's exhibit list as Numbers 13 through 16 17 33? 18 Yes, I am. A. MR. GOORLAND: And, Mr. Chairman, I ask that 19 Ms. -- Dr. Morley's prefiled direct testimony be 20 inserted into the record as though read. 21 CHAIRMAN CARTER: The prefiled testimony of 22 the witness will be inserted into the record as though 23 24 read. (Exhibits 13 through 33 marked for 25 FLORIDA PUBLIC SERVICE COMMISSION

1	identification.)
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
	FLORIDA PUBLIC SERVICE COMMISSION
	FIGHTER FORMER SERVICE COMMISSION

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF DR. ROSEMARY MORLEY
4		DOCKET NO. 09EI
5		
6	Q.	Please state your name and business address.
7	A.	My name is Dr. Rosemary Morley, and my business address is Florida Power
8		& Light Company, 700 Universe Blvd., Juno Beach, Florida 33408.
9	Q.	By whom are you employed and what is your position?
10	А.	I am employed by Florida Power & Light Company ("FPL" or the
11		"Company") as the Director of Load Forecasting and Analysis.
12	Q.	Please describe your duties and responsibilities as FPL's Director of Load
13		Forecasting and Analysis.
14	A.	I am responsible for the development of FPL's peak demand, energy,
15		customer and economic forecasts.
16	Q.	Please describe your educational background and professional
17		experience.
18	A.	I hold a bachelor's degree (B.A.) with honors in economics from the
19		University of Maryland and a master's degree (M.A.) in economics from
20		Northwestern University. In 2005, I earned a Doctorate in Business
21		Administration (D.B.A.) from Nova Southeastern University. I began my
22		career with FPL in 1983 as an Assistant Economist. I have since held a
23		variety of positions in the forecasting, planning, and regulatory areas.

1		Between 199	6 and 2007, 1	I was the Rate Development Manager for FPL.
2		During that t	ime, I testified	on a number of issues, including the forecast of
3		billing determ	ninants by rate	class and the Company's load research studies. I
4		am a membe	r of the Natio	nal Association of Business Economists and the
5		Institute of B	usiness Forecas	sting and Planning.
6	Q.	Are you spor	nsoring any ex	hibits in this case?
7	А.	Yes. I am sp	onsoring the f	ollowing exhibits which are attached to my direct
8		testimony:		
9				
10		•	RM-1	Actual and Forecasted Summer Peak (MW)
11		•	RM-2	Summer Peak Forecasting Error
12		•	RM-3	Annual Percent Change in Florida's Population
13		•	RM-4	Historical Population Growth
14		•	RM-5	Annual Change in Population, Long-term
15				Moving Averages
16		•	RM-6	University of Florida's Population Under-
17				Forecast
18		•	RM-7	Total Average Customers
19		•	RM-8	Real Household Disposable Income
20		-	RM-9	Real Price of Electricity
21		-	RM-10	Impact of the Appliance Efficiency Standards
22		•	RM-11	New Wholesale Contracts
23		-	RM-12	Summer Peak Load per Customer (kW)

1		• RM-13	Summer Peak Load (MW)
2		• RM-14	Long-Term Growth in Summer Peak (MW)
3		 RM-15 	Changes in Forecasted Summer Peak Since the
4			2008 Ten-Year Site Plan
5		• RM-16	Winter Peak Load (MW)
6		■ RM-17	Long-Term Growth in Winter Peak (MW)
7		■ RM-18	Net Energy for Load Use Per Customer (kWh)
8		■ RM-19	Net Energy for Load (GWh)
9		• RM-20	Long-Term Growth in Net Energy for Load
10			(GWh)
11		■ RM-21	Changes in Forecasted Net Energy for Load
12			Since the 2008 Ten-Year Site Plan
13	Q.	What is the purpose of you	ur testimony?
14	A.	The purpose of my testimor	ny is to (i) describe FPL's load forecasting process,
15		(ii) identify the underlying r	nethodologies and assumptions, (iii) present FPL's
16		long-term load forecast and	d (iv) describe how that forecast differs from the
17		load forecast filed in the 200	08 Ten-Year Site Plan.
18	Q.	Please summarize your tes	stimony.
19	A.	My testimony examines th	e factors which drive FPL's customer and load
20		growth. Based on reaso	onable assumptions and recognized forecasting
21		methods, FPL's forecast she	ows that the conditions leading to declines in load
22		growth recently experience	d will dissipate in the next few years. Although
23		below the level assumed in	the 2008 Ten-Year Site Plan, substantial long-run

1		growth is still projected for the system. Between 2008 and 2018, FPL is
2		projecting a 2.2% annual increase in the summer peak, or a cumulative
3		increase of 5,083 MW. Over the longer term, the absolute increase will be
4		even more substantial. Between 2008 and 2025, FPL is projecting a 2.3%
5		annual increase in the summer peak, or a cumulative increase of 9,913 MW.
6		By 2030, the summer peak is projected to reach 33,931 MW or a cumulative
7		increase of 12,871 MW over the 2008 summer peak.
8		
9		BACKGROUND
10		
11	Q.	What principles does FPL rely on in developing its load forecast?
12	А.	FPL relies on three principles in developing its load forecast. First, a load
13		forecast depends on an understanding of the underlying data. As a result, the
14		most relevant and timely data should be carefully examined. This includes a
15		review not only of the variables to be forecasted, but also of the factors which
16		may influence future values. Accordingly, FPL reviews demographic and
17		economic projections from a number of industry experts, including the
18		University of Florida and Global Insight. Second, a load forecast should be
19		based on statistically sound models. In this regard, FPL relies on
20		econometrics as the primary tool for projecting future levels of customers and
21		sales. An econometric model is a numerical representation, obtained through
22		statistical estimation techniques, of the degree of relationship between a
23		dependent variable, e.g., net energy for load (NEL), and the independent

(explanatory) variables. FPL has consistently relied on econometric models
 for various planning purposes and the modeling results have been reviewed
 and accepted by the Florida Public Service Commission ("FPSC" or
 "Commission") in past proceedings. Third, a load forecast must reflect sound
 judgment. While intangible, sound judgment is critical, particularly during
 periods of rapid change and uncertainty.

7 Q. What are the principal components of the long-term load forecast?

8 A. The principal components of the long-term forecast are total customers, 9 summer peak, winter peak and NEL. The summer peak, winter peak and NEL 10 are forecasted on a per customer basis. Thus, the customer forecast in 11 combination with the summer peak per customer forecast yields the summer 12 peak forecast. A similar approach is used in forecasting the winter peak and 13 NEL.

14 Q. How accurate has FPL's load forecast been historically?

A. Based on a review of FPL's Ten-Year Site Plans, the accuracy of the shortterm forecast has been very good with a one year-ahead error in absolute
terms of 2.3% since 1989. Longer-term accuracy has proven more
challenging, with a ten year-ahead forecasting error in absolute terms of
10.5%.

20 Q. Why has the longer term accuracy proven more challenging?

A. The factors driving the demand for electricity (e.g., population growth, the
 economy, the price of electricity) are subject to increasing uncertainty as the
 forecasting horizon expands. For example, customer growth next year will be

influenced by next year's population growth, which in turn will be influenced
by actual population levels this year. However, a forecast of customer growth
ten years from now must consider multiple years of population growth and
this year's actual population level is likely to have a progressively smaller
impact on future population growth as time goes on.

6 Q. Has there been any pattern in the direction of variances in the long-term 7 forecast?

8 A. Yes. Based on the Ten-Year Site Plans filed between 1989 and 1999, the 9 long-term summer peak has been consistently under-forecasted. This is 10 illustrated by Exhibits RM-1 and RM-2, which compare actual peaks with 11 what had been forecasted for that year ten years prior. Given the recent 12 slowdown in load growth, the direction of future forecasting errors is subject 13 to great uncertainty. On the other hand, as I discuss later in my testimony, the 14 recent slowdown in load growth has been influenced by factors which are 15 expected to dissipate over time and return FPL's load growth to more 16 historically typical levels. To the extent the rebound in usage exceeds current 17 expectations, future values for the summer peak may again exceed forecasted 18 levels.

CUSTOMER GROWTH FORECAST

2

3

4

1

Q. How many customers receive their electric service from FPL and where are they located?

5 A. FPL currently serves about 4.5 million customers. This amounts to a 6 population of almost nine million people. FPL's service territory covers 7 approximately 27,650 square miles within peninsular Florida, which ranges 8 from St. Johns County in the north to Miami-Dade County in the south, and 9 westward to Manatee County. FPL serves customers in 35 counties within 10 this region.

11 Q. What customer growth has FPL experienced historically?

A. FPL has historically experienced significant customer growth, averaging a
2.6% annual growth rate since 1980 or an average increase of 83,000
customers per year. Cumulatively, more than 2.3 million customers have been
added since 1980, more than doubling FPL's customer base.

16 Q. What customer growth has FPL experienced recently?

A. By historical standards, FPL has experienced minimal customer growth since
2007. During 2008, FPL's customer base increased by only 0.3% or 13,000
customers. The slowdown in customer growth has been driven by the shortterm reductions in population growth stemming from the current recession.

1

Q.

How does FPL forecast customer growth?

A. As noted above, customer growth is primarily determined by changes in
 population. Accordingly, FPL forecasts total customers using an econometric
 model with population and seasonal factors as the explanatory variables.

5

Q. What population growth has Florida experienced historically?

6 A. Florida has experienced substantial long-term population growth. The State's 7 population has nearly doubled since 1980, an increase of over nine million. 8 As Exhibit RM-3 shows year-to-year growth has been cyclical with 9 population growth falling during recessions and rebounding thereafter. In 10 addition, over the long-term the annual percentage rate of population growth 11 has tended to drift downward over time. However, in absolute terms, the 12 annual increase in population growth has been more stable. Exhibit RM-4 13 shows that annual absolute increases in population have been very large until 14 the current recession. A moving average of a series is sometimes calculated to 15 distinguish the underlying trend in a series from its cyclical pattern. As 16 Exhibit RM-5 shows, on a moving average basis, the annual increase in 17 Florida's population growth has been fairly consistent, averaging between 18 300,000 and 350,000 in most years since 1985.

19 Q. What source does FPL rely on for its population projections?

A. FPL relies on population projections produced by the Bureau of Economic
 and Business Research of the University of Florida. In addition, FPL reviews
 other factors which may influence population projections, including economic
 forecasts and historical trends in population growth.

Q. How accurate has the University of Florida been in its population projections?

On the one hand, the University of Florida's short-term forecasting accuracy 3 A. has been impressive. Based on population projections since 1991, the 4 5 University of Florida has on average forecasted population on a year-ahead 6 basis within 0.9% of actuals. However, longer-term forecasting has proven 7 more challenging. Based on population projections since 1991 and a ten-year 8 forecasting horizon, the University of Florida has on average forecasted long-9 term population within 5.9% of actuals. Moreover, these long-term 10 population projections from the University of Florida have been consistently below actuals. Exhibit RM-6 shows that since 1991 the forecast error has 11 12 averaged nearly a million people short of actual, based on a ten-year 13 forecasting horizon. Of course, it is not known whether this trend in underforecasting long-term population growth will continue. Nevertheless, 14 historical performance suggests that there has been some tendency to 15 16 underestimate long-term population growth.

17 Q. How often does the University of Florida revise its population 18 projections?

A. Population projections from the University of Florida have been somewhat
dynamic in recent years. The University of Florida typically projects
statewide population growth at least once a year. Between November 2007
and October 2008, the University of Florida released four sets of baseline
population projections. In each case, the revised population projections

indicated a progressively lower outlook for the state's population growth. The
 October 2008 population projections were the most recent projections
 available at the time FPL developed its load forecast.

4 Q. What is the short-term outlook for population growth in the University of
5 Florida's October 2008 projections?

A. The University of Florida's October 2008 baseline projections indicate record
low growth through 2010. Specifically, the University of Florida estimates
the State's population grew by only 127,000 in 2008 versus a long-run
average between 300,000 and 350,000. The University of Florida projects a
continuation of this trend in 2009 with a projected population increase of only
75,000.

12 Q. What explains this substantially lower than average growth in the short13 term?

14 Α. According to the Office of Economic and Demographic Research, the current 15 economic recession accounts for much of this slowdown. Historically, most 16 of Florida's population growth has come from net migration (the number of 17 permanent residents moving into versus out of the state). Much of the State's 18 in-migration, in turn, has been driven by job growth. The current recession 19 has significantly reduced employment opportunities and therefore curtailed 20 the migration of job seekers into the state. In addition, the nationwide housing 21 slump has made it difficult for both retirees and working age adults to relocate 22 to Florida. Consequently, the University of Florida is projecting minimal net

2

migration through 2010. As the economy improves after 2010, the University of Florida is projecting a modest increase of in-migration.

3 Q. What is the long-term outlook for population growth in the University of 4 Florida's October 2008 projections?

5 Over the long-term, the University of Florida is projecting that the State's A. 6 population growth, both in terms of percentage growth and absolute numbers, 7 will remain below historical averages. As shown in Exhibit RM-3, the 8 University of Florida's October 2008 projections show that even with a 9 rebound in population growth in 2012 and 2013, the percentage increase will 10 remain at historic lows. The University of Florida's projected 1.65% population growth in 2012 is the highest growth rate in the forecasting 11 12 horizon. This peak rate of population growth in the forecasting horizon is 13 below the low-point in population growth experienced during any prior recession since 1970. In terms of absolute increases, the University of Florida 14 15 is projecting that population growth peaks at 321,000 in 2013 and the rate of 16 increase declines thereafter. As a result, the University of Florida's projected 17 population growth is less than 255,000 between 2008 and 2018. By contrast, 18 the State's long-term population growth has averaged between 300,000 and 19 350,000.

20 Q. Is FPL proposing any adjustments to the University of Florida's October 21 2008 population projections?

A. Yes. FPL is proposing to adjust the population projections between 2012 and
2022 based on the more robust population growth which has historically

occurred after recessions. Due to the current economic recession, many baby 1 boomers are delaying retirement. When the economy recovers, an increase in 2 the in-migration of retirees could be expected. A silver lining in the current 3 housing contraction is an improvement in the relative affordability of housing 4 in Florida. Florida has experienced larger decreases in home prices relative to 5 most areas of the country. This improvement in the relative affordability of 6 housing should make Florida a more attractive destination for both retirees 7 and working age adults when the economy recovers. In addition, recent 8 national surveys suggest that despite the recession-induced slowdown in 9 mobility, almost one-half of all Americans are expressing an interest in 10 moving within the next five years. Moreover, these same national surveys 11 show that Americans continue to rank Florida as one of the most desirable 12 places to live in the country. Thus, the data suggest that there is a degree of 13 14 pent-up demand in terms of in-migration which should be taken into account. FPL's adjustment to the University of Florida's population forecast takes this 15 16 pent-up demand into account.

17 Q. Is the population forecast reflecting FPL's adjustment consistent with
18 historical trends?

A. Yes. With FPL's adjustment, the projected population growth in the longterm returns to a more historically typical level of 335,000 between 2008 and
2018. As shown in Exhibit RM-5, FPL's projected level of population growth
is consistent with long-term patterns in population growth. By contrast, the
population forecast from the University of Florida suggests the level of

population growth, on a moving average basis, will be permanently below its historical average. At the same time, as shown in Exhibit RM-3, FPL's projected population growth reflects the long-term trend of a gradual deceleration in the percentage rate of growth following a post-recession rebound in population.

Q. Have electric utilities in Florida ever utilized population projections that
differ from the baseline projections developed by the University of
Florida?

9 Yes. A review of the 2008 Ten-Year Site Plans shows that electric utilities Α. 10 have utilized population projections that differ from the baseline projections 11 developed by the University of Florida. In some cases, utilities use an alternative vendor. However, in other cases, utilities develop their own 12 population projections either by blending alternative projections or by 13 incorporating input from in-house experts. For example, one utility develops 14 its own population projections by combining high-band, low-band and 15 baseline population projections from the University of Florida with weights 16 based on historical growth rates. In FPL's case, the University of Florida's 17 baseline population projection was used in the 2008 Ten-Year Site Plan. 18 However, this was not always the case. In past years, FPL has developed its 19 own population projections and in some cases utilized the University of 20 Florida's high-band projections. 21

Q.

What is FPL's forecast of total customers?

A. As shown on Exhibit RM-7, the total number of customers is projected to
increase at an annual rate of 1.6% between 2008 and 2018 or about 79,000
customers per year. This absolute level of customer growth is maintained
over the longer-term even as the percentage increase gradually declines. Total
customer growth between 2008 and 2025 is projected to increase at an annual
rate of 1.5% or about 79,000 customers per year.

8 Q. How does FPL's forecast of total customers compare with historical 9 trends?

10 A. FPL's forecast of total customers is consistent with a long-run trend that 11 indicates a gradual deceleration in percentage growth rates over time. 12 Nevertheless, the absolute increases in customers projected are comparable to 13 the levels experienced historically.

14 Q. Is FPL's projected number of total customers reasonable?

A. Yes. In the short-term, the forecast incorporates the most recent population
projections from the University of Florida available at the time the forecast
was developed. The longer term forecast is consistent with long-term average
population growth. The customer forecast is also based on sound statistical
methods previously reviewed and approved by the Commission. In addition,
a comparison of the forecast is reasonable.

SUMMER PEAK DEMAND FORECAST

2

3

4

Q. What growth in summer peak demands has FPL experienced historically?

5 A. Summer peak demands have grown at an average annual rate of 2.8% or
6 408 MW per year since 1980. Effectively, this rate means that FPL's summer
7 peak demand has been doubling every 25 years.

8 Q. What factors accounted for this growth?

9 A. Population growth and an expanding economy are the two principal drivers 10 behind this growth. During much of this time, Florida was one of the fastest growing states in the country. Population growth, in turn, spurred economic 11 12 growth. As described by the Office of Economic and Demographic Research, population growth has traditionally been one of the primary drivers of the 13 state's economic growth. Net migration, in particular, stimulated demand for 14 housing and services, key sectors of the state's economy. An expanding 15 economy stimulated demand for goods and services of all kinds, including 16 17 electricity.

18 Q. What growth in summer peak demand has FPL experienced recently?

A. Summer peak demand has been stagnant since 2005. The 2008 summer peak,
for example, was more than 1,000 MW below its 2005 level.

Q. What factors explain the stagnant growth in the summer peak demand in recent years?

3 Α. To a large extent, the factors which have driven long-term growth have also 4 been depressing the short-term growth in the summer peak demand. Reduced 5 population growth and the economic slowdown are responsible for much of the stagnation in the summer peak demand. The housing crisis has also 6 reduced electricity demands temporarily. By contrast, changes in the 7 appliance stock, which also reduce peak demands, are likely to have a more 8 9 long-term effect. FPL's forecasting methodology strives to take into account both the short-term and long-term factors likely to influence summer peak 10 11 demand.

12

Q. What is FPL's method of forecasting summer peak demand?

The primary determinants of summer peak demand include the economy, 13 Α. 14 weather, the price of electricity, changes in the appliance stock and the addition of new wholesale contracts. Accordingly, FPL forecasts summer 15 peak per customer using an econometric model with explanatory variables 16 representing the economy, weather and the real price of electricity. In 17 combination with the customer forecast, the projected summer peak per 18 customer yields a preliminary projection of the summer peak. 19 The 20 preliminary projection is then adjusted for changes in the appliance stock, the temporary effects of the current housing crisis and the addition of new 21 22 wholesale contracts in order to obtain the forecasted summer peak demands.

What is FPL's outlook for real household disposable income? Q. 1 2 As shown in Exhibit RM-8, real household income is projected to grow at an Α. annual rate of 1.3% between 2008 and 2018. As the impact of the current 3 4 slowdown dissipates the annual growth between 2008 and 2025 rises to 1.6%. 5 0. How does FPL's forecast of real household disposable income compare 6 with long-term growth experienced historically? 7 A. As shown in Exhibit RM-8, the 1.3% projected annual growth between 2008 8 and 2028is below the 2.0% average growth experienced since 1982. 9 Nevertheless, the forecasted absolute increase in real household disposable 10 income is close to its historical average. Over the longer-term, real household disposable income is projected to increase at an annual rate of 1.6% between 11 12 2008 and 2025. As shown in Exhibit RM-8, the absolute increases in real household disposable income between 2008 and 2025 are projected to exceed 13 14 the average growth experienced since 1982. What weather assumptions did FPL assume for the summer peak Q. 15 16 projections? In its summer peak projections, FPL uses the average temperature on the day 17 A. of the peak and the sum of the cooling degree hours in the day prior to the 18 peak. In forecasting these weather variables, FPL relies on a normal weather 19 outlook. Normal weather is based on historical averages since 1989. 20

Q. What pricing assumptions did FPL assume for the summer peak
 projections?

FPL uses the real price of electricity as an explanatory variable in forecasting 3 A. energy use per customer. The real price of electricity is determined by 4 adjusting the nominal price for inflation. The forecasted price of electricity is 5 consistent with fuel cost projections incorporated in FPL's most recent fuel 6 filing. As shown in Exhibit RM-9, the real price of electricity is projected to 7 increase at an annual rate of 1.6% between 2008 and 2018. Over the longer 8 term, a 1.1% increase in the real price of electricity is projected between 2008 9 and 2025. 10

11 Q. How does FPL capture the influence of changes in the appliance stock 12 and efficiency standards in its forecast?

FPL incorporates changes in the appliance stock into its econometric model. 13 A. FPL relies on estimates developed by ITRON, a leading energy consulting 14 firm. ITRON's estimates quantify the reduction in energy use resulting from 15 federally-mandated efficiency standards, such as those codified in the 16 National Energy Policy Act (NEPACT) and the Energy Independence and 17 18 Security Act (EISA). ITRON's estimates also incorporate the impact of 19 compact fluorescent light bulbs, which are projected to significantly reduce 20 lighting loads in advance of the new incandescent standards required in EISA.

21 Q. Are there any other factors influencing summer peak demands?

A. Yes. The housing crisis has had an impact on electricity usage. This is most
directly seen in the number of homes left vacant as a result of the housing

1 crisis. This increase in the number of empty homes has spurred an 2 unprecedented increase in the number of inactive meters. In many cases, 3 however, these empty homes continue to be counted as active FPL accounts 4 because the electricity has not been disconnected. By maintaining an active 5 electric account, the owners of these homes are able to show the home to 6 potential buyers and avoid the mildew damage that occurs without proper 7 ventilation. Accordingly, an adjustment has been made to the projected 2009 8 and 2010 summer peak to account for this phenomenon. The influence of 9 empty homes is expected to dissipate in 2011 and after 2012 no impact on the 10 summer peak is projected.

11 Q. Is FPL making any adjustments for the addition of new wholesale 12 contracts in its forecast?

13 Α. Yes. FPL is adjusting its load forecast to include three new wholesale 14 contracts. First, a 75 MW power sale to Seminole Electric Cooperative is 15 projected for the period December 2008 through December 2009. Second, 16 partial requirements service to the Lee County Cooperative begins in 2010. 17 Lee County is projected to add 212 MW to the summer peak in 2010. Lee 18 County is projected to begin full requirements service in 2014 when its 19 summer peak contribution increases to 853 MW. Finally, a 200 MW contract 20 with Seminole Electric Cooperative is projected to begin in 2014. 21 Exhibit RM-11 shows the new wholesale load FPL is projecting. An 22 adjustment was also made for the termination of the Key West power sales 23 agreement in 2013.

- Q. Is FPL making any other adjustments to its forecast of summer peak
 demands?
- A. Yes. FPL is also adjusting its forecast of summer peak demands for the impact
 of plug-in hybrid vehicles. By 2018, about 49 MW of additional load is
 projected as a result of plug-in hybrids. By 2025, that amount is expected to
 increase to almost 200 MW. Nevertheless, plug-in hybrids are not expected to
 add more than 1% to summer peak demand until 2030.

8 Q. What is FPL's forecast for the summer peak demand per customer?

9 A. As shown in Exhibit RM-12, summer peak demand per customer is projected 10 to remain flat through 2013. Due to the addition of new wholesale load, summer peak per customer is forecasted to increase significantly in 2014. 11 12 Thereafter, moderate growth is projected. Summer peak per customer is projected to increase by 0.6% between 2008 and 2018. This represents an 13 increase from the 0.2% growth rate experienced historically. The addition of 14 new wholesale load is primarily responsible for the higher than historical 15 16 growth rates.

17 Q. What is FPL's forecast for the summer peak demands?

A. As shown in Exhibit RM-13, summer peak demands are projected to increase at an annual rate of 2.2% between 2008 and 2018 or an annual increase of 508
MW. This amounts to a cumulative increase of 5,083 MW over the 2008 summer peak. Between 2008 and 2025, summer peak demands are projected to increase at an annual rate of 2.3% or an annual increase of 583 MW. By 2025, the cumulative increase over the 2008 summer peak is projected to be

9,913 MW. As shown in Exhibit RM-14, by 2030 the summer peak is
 expected to reach 33,931 MW, a 12,871 MW increase over the 2008 summer
 peak.

4

5

Q. Are FPL's demand-side management (DSM) programs reflected in this forecast of summer peak demands?

6 A. Existing programs and participation levels are included in this forecast of 7 summer peak demands. Incremental DSM is not reflected in this forecast of 8 summer peak demands. As discussed by FPL witness Enjamio, in the 9 resource planning process, incremental DSM is treated as an additional 10 supply-side resource option.

11 Q. How does FPL's forecast for the summer peak demands compare with 12 historical trends?

The initial years of the forecast are consistent with the minimal growth in 13 A. summer peak that FPL has experienced since 2006. The forecast of the 14 15 summer peak between 2008 and 2018 is consistent with two long-term trends, 16 namely that the percentage increases in load tend to decelerate over time while the absolute level of increase remains high. Accordingly, the summer peak 17 18 averaged a 2.8% growth rate between 1980 and 2008, which is somewhat higher than the 2.2% rate projected between 2008 and 2018. At the same 19 time, the summer peak averaged an annual increase of 408 MW between 1980 20 21 and 2008, which is less than the 508 MW projected between 2008 and 2018.

Q. How does FPL's forecast for the summer peak demands compare with
 the previously-filed forecast of summer peak demands?

Due largely to lower loads in the initial years of the forecast, FPL's forecast of 3 Α. summer peak demands is lower than the forecast filed in the 2008 Ten-Year 4 Site Plan. FPL witness Stubblefield discusses how the reduction in the load 5 forecast relative to the one filed in the 2008 Ten-Year Site Plan affected the 6 scenarios requested in the Bid Solicitation process. Exhibit RM-15 compares 7 FPL's forecast of summer peak demands with the forecast filed in the 2008 8 Ten-Year Site Plan. The Exhibit shows that by 2018, FPL's forecast of 9 summer peak demand is 3,182 MW below the level forecasted in last year's 10 Ten-Year Site Plan. Nevertheless, after the economy and population growth 11 12 rebound, both sets of forecasts share similar percentage growth rates.

13 Q. Is FPL's projected summer peak demand reasonable?

A. Yes. FPL's projected summer peak demand is based on reasonable
assumptions, is consistent with historical experience, and relies on the
forecasting methods previously reviewed and accepted by the Commission.

17

18

WINTER PEAK DEMAND

19

20 Q. What is FPL's process for forecasting winter peak demands?

A. Like the system summer peak model, the winter peak model is also an
econometric model. The winter peak model is a per-customer model that
includes two weather-related variables: the average temperature on the peak

day and heating degree hours the day before and the morning of the peak. The model also has an economic term, real household disposable income. In addition, adjustments are made to the projected winter peak demand for changes in appliance efficiency, the temporary impact of empty houses and for additional wholesale contracts.

6 Q. What is FPL's projected winter peak demand?

1

2

3

4

5

A. As shown in Exhibit RM-16, the winter peak demand is projected to increase
at an annual rate of 2.7% or 541 MW annually between 2008 and 2018.
Slightly higher absolute increases are projected over the longer term. The
winter peak demand is projected to increase at an annual rate of 2.4% or
525 MW annually between 2008 and 2025. As shown in Exhibit RM-17, the
winter peak is expected to reach 29,352 MW by 2030, an 11,297 MW increase
over the 2008 winter peak.

14 Q. How does FPL's forecast of winter peak demands compare with historical 15 trends?

A. Since 1980, the winter peak has increased at an average annual rate of 2.2% or
297 MW a year. This historical growth rate is influenced by the unusually
mild winter peaks experienced in recent years. Temperatures on the day of
the winter peak have been higher than normal since 2004. As a result, the
forecasted growth rates in the winter peak are somewhat higher than the 1980
through 2008 average growth rate.

1	Q.	Is FPL's projected winter peak demand reasonable?
2	A.	Yes. FPL's projected winter peak demand is based on reasonable
3		assumptions, is consistent with historical experience and relies on the
4		forecasting methods previously reviewed and accepted by the Commission.
5		
6		FORECAST OF NEL
7		
8	Q.	How does FPL forecast energy sales?
9	A.	FPL forecasts energy sales using an econometric model for NEL, which is the
10		energy generated net of plant use. An econometric model for NEL is more
11		reliable than models for billed energy sales because the explanatory variables
12		can be better matched to usage. This is so because the NEL data do not have
13		to be attuned to account for billing cycle adjustments, which might distort the
14		real time match between the production and consumption of electricity.
15	Q.	What growth in NEL has FPL experienced historically?
16	A.	Between 1980 and 2008, NEL grew at an annual rate of 3.0%. Effectively,
17		this rate meant FPL's NEL has been doubling every 23 years.
18	Q.	What factors accounted for this growth?
19	A.	Consistent with the historical increases in summer peak demands previously
20		discussed, population growth and an expanding economy are the two principal
21		drivers behind the growth in NEL FPL has experienced historically.

Q.

What growth in NEL has FPL experienced recently?

A. FPL's NEL declined in 2008 following below average growth in 2006 and
2007. The cyclical declines in population and economic growth we are
currently experiencing have contributed to the stagnation in NEL in recent
years.

6 Q. What are the primary determinants of energy use per customer?

A. The primary determinants of energy use per customer include the economy,
weather, the price of electricity, changes in the appliance stock and the
addition of new wholesale contracts. Accordingly, FPL's forecast of energy
use per customer reflects each of these factors. FPL forecasts energy use per
customer using an econometric model with explanatory variables representing
a number of these factors. The remaining factors are used to adjust the results
of the econometric model.

14 Q. How does FPL measure the influence of the economy in forecasting 15 energy use per customer?

A. FPL measures the influence of the economy using real household disposable
income, consistent with its summer peak demand model.

18 Q. How does FPL measure the influence of weather in forecasting energy use
 19 per customer?

A. FPL measures the influence of weather based on cooling and heating degree
hours. Historical cooling and heating degree hours are explanatory variables
in the energy use per customer model. The forecasted number of cooling and
heating degree hours is based on twenty year averages.

Q. What pricing assumptions did FPL assume in forecasting energy use per customer?

A. FPL uses the real price of electricity as an explanatory variable in forecasting energy use per customer. The real price of electricity is consistent with assumptions used in the summer peak model. In the case of energy use per customer, the real price of electricity is based on a rolling 12-month average.

7 Q. What adjustments are made in forecasting NEL?

A. Consistent with the adjustments used in forecasting summer peak demands,
adjustments are made for changes in the efficiency of the appliance stock, for
the temporary impact of empty homes, for the addition of new wholesale
contracts and for plug-in hybrids. The adjustment for empty homes is a shortterm adjustment which does not affect NEL after 2011. The additional load
from plug-in hybrids is expected to be at or below 1% of NEL through 2030.

14 Q. What is FPL's forecasted energy use per customer?

A. As shown in Exhibit RM-18, FPL is forecasting almost flat energy use per customer through 2013. With the addition of new wholesale load, energy use per customer increases significantly in 2014. Moderate growth is projected thereafter. Between 2008 and 2018, a 0.1% annual growth in energy use per customer is projected. This growth rate is projected to increase to 0.4% between 2008 and 2025.

21 Q. What is FPL's forecast of NEL?

A. As shown in Exhibit RM-19, FPL is forecasting an annual increase of 1.8% in
NEL between 2008 and 2018 with NEL reaching 132,136 GWh in 2018.

Between 2008 and 2025, a 2.0% annual growth rate is expected with NEL reaching 154,863 GWh by 2025. As shown in Exhibit RM-20, by 2030 NEL is expected to reach 167,114 GWh, a 56,111 GWh increase from the level in 2008.

5 Q. How does FPL's forecast of NEL compare with historical trends?

1

2

3

4

6 Α. The forecast of net energy between 2008 and 2018 is consistent with two 7 long-term trends, namely that the percentage increases in load tend to 8 decelerate over time while the absolute level of increase remains high. 9 Accordingly, net energy averaged a 3.0% growth rate between 1980 and 2008, 10 significantly higher than the 1.8% rate projected between 2008 and 2018. At the same time, NEL averaged an absolute annual increase of 2,234 GWh 11 between 1980 and 2008, which is close to the 2,113 GWh projected between 12 2008 and 2018. 13

14 Q. How does FPL's forecast of NEL compare with the previously filed15 forecast?

Due in part to lower growth in the initial years of the forecast FPL's forecast Α. 16 of NEL is below the levels assumed in the 2008 Ten-Year Site Plan. FPL 17 witness Stubblefield discusses how the reduction in the load forecast relative 18 to the one filed in the 2008 Ten-Year Site Plan affected the scenarios 19 requested in the Bid Solicitation process. As shown in Exhibit RM-21, the 20 level of NEL in 2018 in the current forecast is 31,978 GWh below the level 21 assumed in the 2008 Ten-Year Site Plan by 2018. Nevertheless, long-term 22 23 growth remains robust under the current forecast.

1 Q. Is FPL's NEL forecast reasonable?

A. Yes. The forecast reflects a careful review of the factors influencing energy
use per customer. The forecast is based on sound statistical methods
previously reviewed and approved by the Commission. In addition, a
comparison of the forecast with historical trends suggests that the forecast is
reasonable.

- 7 Q. Does this conclude your testimony?
- 8 A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition to determine need for Florida) EnergySecure Pipeline by) Florida Power & Light Company) Docket No: 090172-EI Served: July 24, 2009

ERRATA SHEET

DIRECT TESTIMONY OF DR. ROSEMARY MORLEY

10

<u>PAGE #</u>

LINE # CORRECTION

21

strike "supply side", replace "option" with "in the resource plan"

Respectfully submitted this 24th day of July, 2009.

R. Wade Litchfield, Vice President and Associate General Counsel John T. Butler, Senior Attorney Florida Power & Light Company 700 Universe Boulevard Juno Beach, FL 33408 Telephone: (561) 304-5253 Facsimile: (561) 691-7135

and -

HOPPING GREEN & SAMS, P.A.

huns By:

Gary V. Perko Brooke E. Lewis 123 S. Calhoun Street (32301) P.O. Box 6526 (32314) Tallahassee, Florida 850-222-7500 Fax: 850-224-8551

Attorneys for Florida Power & Light Company

1

FPSC-COMMISSION CLERK

7582 JUL 24 8

DOCUMENT NUMBER-DATE

1 BY MR. GOORLAND: 2 Dr. Morley, have you prepared a summary of Q. 3 your direct testimony? Yes, I have. 4 Α. 5 Would you please provide your summary to the Q. Commission? 6 7 Α. Yes. Good morning, Commissioners. The purpose of 8 my testimony is to address Florida Power & Light's --9 CHAIRMAN CARTER: Dr. Morley, excuse me. 10 Would you pull the mike a little closer to you? There 11 12 you go. **THE WITNESS:** Is that better? 13 CHAIRMAN CARTER: Yes, ma'am. Would you mind 14 starting over? 15THE WITNESS: Not at all. 16 CHAIRMAN CARTER: Thank you. 17 THE WITNESS: Good morning, Commissioners. 18 The purpose of my testimony is to address Florida Power 19 & Light Company's forecast of customers, sales and peak 20 21 demands. FPL's forecast reflects a careful 22 consideration of the factors influencing the long-term 23 growth of our customers, sales and peak demands. In 24 developing the forecast, we have reviewed economic and 25 FLORIDA PUBLIC SERVICE COMMISSION

demographic projections from a number of noted sources and performed a thorough examination of current and past patterns and growth.

1

2

3

FPL's forecast acknowledges the seriousness of the economic downturn we are currently experiencing. At the same time, we must recognize the strong long-term growth Florida has historically experienced, growth that even the most seasoned experts have repeatedly underestimated.

Accordingly, our forecast takes into account the effects of the recession we are currently experiencing and also takes into account reasonable assumptions regarding Florida's long-term economic and demographic growth.

In addition to long-term economic and demographic growth, other key assumptions in our sales and peak demand forecasts are trends in appliance efficiency standards and changes in the composition of our wholesale contracts. As such, our forecast recognizes factors that may increase or decrease the long-term sales and peak growth.

These key assumptions are incorporated into econometric models in order to derive our load forecast. Econometric modeling is the industry standard for utility forecasting, and these models have been reviewed

and accepted by the Commission in FPL's past filings. Based on statistically verified econometric models and reasonable assumptions regarding population growth, the economy and appliance standards, FPL's load forecast represents a realistic and balanced projection of long-term growth.

7 While the initial years of the forecast are 8 significantly below the levels forecasted in last year's 9 Ten-Year Site Plan, substantial long-term growth is 10 still projected. Between now and 2018, FPL's summer 11 peak demand is expected to increase by more than 12 5,000 megawatts, a cumulative increase of 24 percent 13 over the 2008 level.

Large increases in sales are also projected, 14 15 with a cumulative increase of 21,000 megawatt hours between 2008 and 2018, a cumulative increase of 16 19 percent. Over the long term the cumulative growth is 17 even larger. By 2030 the summer peak demand is 18 projected to increase by over 60 percent relative to the 19 2008 level, while energy sales are projected to increase 20 21 by over 50 percent.

In conclusion, FPL's forecast calls for robust long-term growth in customers, sales and peak demands. This concludes my summary.

25

MR. GOORLAND: And at this time I tender the

FLORIDA PUBLIC SERVICE COMMISSION

1 witness for cross-examination. 2 CHAIRMAN CARTER: Mr. Self. 3 MR. SELF: We have no questions for this 4 witness, Mr. Chairman. 5 CHAIRMAN CARTER: Staff? 6 CROSS EXAMINATION 7 BY MS. BROWN: 8 Q. Good afternoon, Ms. Morley. 9 A. Good afternoon. 10 Q. I was just trying to check whether it was 11 morning or afternoon. 12 I have a few questions to ask about the origin 13 of the forecast that you've used in this docket. 14 Would it be correct to say that in the normal 15 course of business you produce your short- and long-term 16 load forecast on an annual basis and that those 17 forecasts are included as part of FPL's Ten-Year Site 18 Plan filed with the Commission? 19 Α. Yes. And, in fact, the forecast in this 20 docket is the, is our forecast we used in the 2009 21 Ten-Year Site Plan. 22 Okay. Did you file testimony in FPL's current Q. 23 rate case, Docket 080677? 24 Α. Yes, I did. 25 Q. And is it true that your testimony in that FLORIDA PUBLIC SERVICE COMMISSION

1 docket is to present the load forecast used there, and 2 that that forecast is the same as the forecast used in 3 this docket? 4 Α. Yes, that is true. 5 Q. You did not file testimony in this year's 6 nuclear power plant cost recovery filing; correct? 7 Α. That's correct. 8 Q. Are you aware that the long-run forecast of 9 summer peak demand contained in your 2009 Ten-Year Site Plan is used as an input into the economic feasibility 10 11 analysis of the nuclear plants in that docket? 12 Α. That's my understanding. Yes. 13 Ο. Did you file testimony in the West County 14 Energy Center Unit 3 power plant need determination? 15 Α. Yes, I did. 16 Q. And in that docket what were FPL's population 17 projections based on? 18 Those population projections were based on the Α. 19 November 2007 estimates from the University of Florida. 20 0. And in that docket -- and I guess I should 21 name the docket, it's 080203 -- did FP&L modify the 22 University of Florida's projections? 23 Α. No, we did not. And the reason we didn't is 24 because those projections from the University of Florida 25 were not substantially below the long-run growth we have

1 historically experienced; whereas in this case, the 2 University of Florida is forecasting not just slower 3 growth from the current recession but actually a permanently lower level of growth going out ten years 4 5 and so forth. So in this case we did modify the 6 forecast from the University of Florida. 7 0. In your testimony at Page 9, Lines 6 through 8 9 -- let me know when you're there. 9 Α. Did you say Page 9? 10 Q. Uh-huh. 11 Α. I am there. 12 You indicate that based on ten-year Q. 13 forecasting horizon, U.S. population projections have, 14 since 1991 have been within 5.9 percent of the actual 15 population growth; is that correct? 16 Yes. And to clarify, it isn't that they've Α. 17 been within. They have been below. In fact, they, 18 their forecast from the University of Florida, their 19 long-term forecast going out ten years has been 20 consistently below the actual population level. 21 And just to clarify for the purposes of this Q. 22 docket, if we were to look at a ten-year forecasting 23 horizon, what year would we look at? 24 Α. We would be looking at 2018, consistent with 25 the current 2009 Ten-Year Site Plan.

FLORIDA PUBLIC SERVICE COMMISSION

Now I have a guestion, part of which refers to 1 Q. 2 your rebuttal testimony. 3 MS. BROWN: And if, if I have permission, I would like to ask, or we can defer until we get to 4 5 rebuttal. CHAIRMAN CARTER: Let's, let's check with both 6 7 of the parties before we do that. We'll ask Mr. Butler 8 first and then we'll ask Mr. Self. 9 Mr. Butler? I'm sorry. 10 MR. BUTLER: I am flexible to go either way, but I guess my preference would be to defer it to 11 12 rebuttal. I mean, that way you're not sort of getting 13 ahead of yourself, and certainly can reference back to 14 what is raised in the direct. 15CHAIRMAN CARTER: Okay. Mr. Self? MR. SELF: I don't have a preference, Mr. 16 17 Chairman. I do recognize that as a general proposition there may be questions in direct that sort of lead into 18 rebuttal. Certainly when there's rebuttal questions, 19 20 you may have to kind of reference some direct in order for the question to make sense. Whatever works. 21 CHAIRMAN CARTER: Why don't we do this, why 22 don't we just do it at, during rebuttal. Okay? 23 MS. BROWN: That's fine. That's fine. 24 25 BY MS. BROWN:

216

During your, during your deposition you 1 Ο. indicated that your load forecasts are used to determine 2 what is needed in terms of future generation; correct? 3 Α. Yes. 4 5 Your load forecast was used to determine the Q. 6 generation expansion plan that was used by Witness 7 Enjamio to evaluate the cost-effectiveness of the 8 EnergySecure pipeline; correct? 9 That's correct. Of course, Witness Enjamio Α. 10 would have to address the details of that. 11 Sure. During your deposition you also Q. 12 indicated that you would expect the forecasting error to 13 increase as the forecasting horizon becomes greater; 14 correct? 15 Α. Yes. 16 And is this in part because an error in the Q. short-term forecast becomes compounded as you go out in 17 time? 18 19 I'm not sure. I think, you know, if the Α. question has to do with our short-term forecasting 20 error, the fact is that our forecast, our sales forecast 21 22 for 2009 is, is very close to, to actuals. So I think 23 based on that I certainly would not expect to see any 24 compounding. 25 But in general wouldn't you agree with that Q.

2

3

4

5

6

7

8

9

10

11

12

13

14

proposition?

A. Yes. And in fact I think what I may have mentioned during the deposition is that FPL has also had a tendency to under forecast long-term peak. And as we go further out in time from five years to ten years, that tendency gets larger.

Q. Do you believe that there are unique challenges in forecasting short-term population growth at this time, given the recession, which you indicated is more severe than those seen over the last 25 years?

A. I would say no. Again, based on the accuracy of our short-term sales forecast, which has been very accurate, I think if there are challenges in the short-term forecast, we're meeting them.

I would like to say that while our short-term 15 forecast for the sales is right on, is we actually ended 16 up under forecasting the summer peak this year. We had 17 some unusually warm weather and we actually ended up 18 having a higher peak than forecasted. I think it was 19 about 1,200 megawatts higher. That really would have 20 been the level we forecasted for 2013. And, again, 21 that's really more a function of the weather, not a 22 function of the customer forecast or the population 23 24 forecast, which, you know, we think we've otherwise got a really good handle on the short-term forecast. 25

1	CHAIRMAN CARTER: Ms. Brown, before you go
2	further, let's do this, kind of
3	MS. BROWN: Actually, Mr. Chairman, we're
4	done.
5	CHAIRMAN CARTER: Okay. All right then.
6	Well, let's do this. Commissioners, before we come back
7	to the bench, we'll go ahead on and take our break and
8	come back. That will give the parties an opportunity
9	and as well as our staff an opportunity to kind of get
10	their thoughts and everything together.
11	With that, pursuant to what I said before,
12	we'll come back at 1:45. We're on recess.
13	(Recess taken.)
14	(Transcript continues in sequence with Volume
15	2.)
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
	FLORIDA PUBLIC SERVICE COMMISSION

1	STATE OF FLORIDA)
2	COUNTY OF LEON) CERTIFICATE OF REPORTER
3	
4	I, LINDA BOLES, RPR, CRR, Official Commission
5	Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.
6	IT IS FURTHER CERTIFIED that I
7	stenographically reported the said proceedings; that the
8	same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.
9	I FURTHER CERTIFY that I am not a relative,
10	employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties'
11	attorneys or counsel connected with the action, nor am I financially interested in the action.
12	DATED THIS 30 day of
13	2009.
14	
15	LINDA BOLES, RPR, CRR
16	FPSC Official Commission Reporter (850) 413-6734
17	
18	
19	
20	
21	
22	
23	
24	
25	
	FLORIDA PUBLIC SERVICE COMMISSION
	LTOUTON LODITO SEVATOR COMPLETION